GILLESPIE, KIDD & COIA:

ECCLESIASTICAL ARCHITECTURE 1931-1979

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Abstract

Due to the continued success of the architectural practice of Gillespie, Kidd & Coia (1927-87) over many decades of the twentieth century, this study provides an important opportunity to examine building designs shaped by a number of its contributors. Giacomo Antonio Coia (1898-1981), more usually known simply as Jack Coia, winner of the 1969 RIBA Royal Gold Medal, became its principal practitioner following the death of his partner, William Kidd (1879-1929). Many individuals passed through the practice doors, some simply as apprentices, while others would graduate to the level of architectural assistant, and a small number would eventually become partners in the firm.

The practice created an array of interesting and sometimes experimental work for a number of institutions (they undertook few private commissions for individual clients). Foremost was their work for the Roman Catholic Church, the engagement of which ensured a rich source of commissions until Coia's retirement in 1976.

In recent years, we have been taught of the contributions of individual members of the practice, and to the significance of its final experimental phase of church building. However, the ecclesiastical designs of Gillespie, Kidd & Coia provide a vehicle for the study of the way in which a single practice could respond to a rapidly changing twentieth century landscape of architectural theory and practice, liturgical narrative and societal and demographic upheaval and transition. This was due not least to the continued presence of ecclesiastical commissions from the early phase of practice, the firm's survival of the vicissitudes of war, and to its subsequent re-emergence and burgeoning success.

This thesis suggests an alternative view to the separation of the practice's chronological history and personnel. Instead, it proposes that through measured analysis, it is possible to understand the rich and varied ecclesiastical compositions of Gillespie, Kidd & Coia as a complete body of work, and to demonstrate that in linking their later schemes with those that came earlier, their work has international significance and parallels.

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Introduction

Since its closure in the mid-1980s, a number of authors have contributed to our knowledge of the firm by examining a variety of themes associated with it. In 1986, Robert Rogerson wrote of Jack Coia in the eponymous title*,* charting *his life and work*, as the practice drew to a close, and while the death of Coia was still a recent memory.[1] A decade later, Diane Watters, writing for RCAHMS[2] focused on the creation and subsequent functional and physical disintegration of one of the practice's most well known buildings, St. Peter's Seminary, Cardross. This followed DOCOMOMO's highlighting of the complex as a significant example of modern architecture, a photographic survey by RCAHMS in light of proposals for its demolition, and a cataloguing of the scheme drawings at the Mackintosh School of Architecture.[3] A decade after that, a collaboration between *The Lighthouse, Scotland's Centre for Architecture, Design and the City,* The Glasgow School of Art, and RCAHMS conceived of an exhibition and publication that demonstrated part of the firm's architectural output, from 1956-1987.[4] This was prompted by the cataloguing of the office archives, originally gifted to the Glasgow School of Architecture by longstanding practice members, Andy MacMillan (1928-2014) and Isi Metzstein (1928-2012) in 2001.[5]

It is in this context of diverse institutional and design emphases that an opportunity to collectively draw together the ecclesiastical work of Gillespie, Kidd & Coia as a whole firm has arisen. This builds on the authoring of the individual reputations of the practice's three principal architects, Coia, Metzstein and MacMillan, and on the significance of St. Peter's Seminary to the Modern Movement in Scotland. Given the detailed study already undertaken on Cardross, this work evaluates the firm's other ecclesiastical achievements through its long and varied period of practice, attempting to contribute to a gap in knowledge of this most renowned area of their oeuvre. The research question central to this study asks,

[1] Rogerson had initially approached Coia with idea of a book in 1978. See Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, 'About the autor' (inside front cover'.

[2] The Royal Commission on the Ancient and Historical Monuments of Scotland

[3] Watters, D. (1997). Cardross Seminary: Gillespie, Kidd & Coia and the architecture of postwar Catholicism. Edinburgh: RCAHMS, p. 4.

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[5] Gillespie, Kidd & Coia Architecture 1956-1987. *Home.* [Online] [Accessed on 21st June 2017] http://gillespiekiddandcoia.co.uk/home.html

How might we re-assess the reputations of Jack Coia, Isi Metzstein and Andy MacMillan, and in so doing, shed light on the ecclesiastical work of the practice as a whole?

The question raises a pivotal argument; that it is possible to re-evaluate the contributions of key personnel such that their work is seen together through the lens of a single practice. It may then be possible, through parallel typological study, to regard the whole firm as a design practice of international significance.

The study's aims can be summarised as follows:

1) To take account of the various designers involved in the practice, and client base of Gillespie, Kidd & Coia

2) To develop a methodology that will allow the ecclesiastical work of Gillespie, Kidd & Coia to be objectively scrutinized as a whole

3) To evaluate the significance of the ecclesiastical work of Gillespie, Kidd & Coia in an international context

Although the specific focus of this study is the work of one architectural firm, these events reveal a practice set against a wider background of social, theological, and architectural transience.

Socio-architectural context

The context and reasons for the large number of new parish churches and other ecclesiastical commissions with which the firm was associated, can be understood by learning of the secular and religious attitudes of post – First World War Scotland. Following the devastation to human life and the economy wreaked by war, social sentiment reflected a sense of poverty of the country. Scotland had fared particularly badly in the immediate post-World War period and continued to experience economic decline throughout the 1920s and in the great economic depression of 1929-32.

In trade and industry, the nation's traditional heavy engineering centring on the Clydeside shipbuilding yards had begun to wane. Socially, there had been mass immigration – mainly of Irish immigrants, for decades following the years of famine of the mid-nineteenth century; and in building terms the doctrine of 'planning' was implemented as a method of

social reform, and was made possible by governmental devolution through the various agencies of the Scottish Office.[6] The area of housing provision for the working classes was particularly targeted for improvement, with some parts of the nation, particularly in Glasgow, having particularly severe levels of overcrowding. Recommendations for this were outlined in the influential Ballantyne Report (1917), and followed wartime Clydeside rent strikes. According to Glendinning, It not only allowed for housing rental subsidies, but also for local councils to undertake the building and management of such housing.[7] Following this, John Wheatley's (1869-1930) 1924 Housing Act, set in motion an 'influential legacy' of social house building in the UK[8]. In Glasgow itself, where Wheatley was a City Councillor before the First World War, over 20,000 'two- and three apartment houses', equating to 42 per cent of the total number of government-subsidised houses, were built during the inter-war period as a direct result of the 1924 Act[9].

Glasgow began to buy up vast tracts of land around its peripheries – in effect, greenbelt countryside, in order to expand its boundaries. To some extent, this was made possible by the deaths of owners or heirs to large country estates, following the First World War. The English Garden City movement had been one of the most influential factors in the shaping of these new Glaswegian suburbs. It was, however, perhaps a misguided attempt to re-define the living habits of a city, which had for centuries followed a largely European model of stacked, tenement living, and did little to enhance or improve upon the city's once-strong urban form of sturdy, red sandstone inhabited walls.

This turbulent period of social and economic change was defined in the 1930s by a 'measured questing for ''modernity''[10] in architecture, but any such innovation was relatively slow, and as Miles Glendinning and Diane Watters discuss, was a function of two primary lines of architectural thinking that characterised building design in Scotland at that time. The notions of 'Traditional' and 'Modern'[11] approached the aims of a modernising welfare state from differing perspectives; the former being driven by

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[6] Glendinning, M., MacInnes, R. & MacKechnie, A. (1996) *A history of Scottish architecture from the Renaissance to the present day*. Edinburgh: Edinburgh University Press, pp. 385-6.

[7] Glendinning, M. (2011) 'A modernist vernacular? The hidden diversity of post-war council housing.' *In* Guillery, P. (ed.) *Built from below British architecture and the vernacular*. Abingdon: Routledge, pp.169-188.

[8] UK Parliament. *John Wheatley and the Housing Act 1924.* [Online] [Accessed on 22nd June 1917]

https://www.parliament.uk/about/living-heritage/transformingsociety/towncountry/towns/collections/labhousing1/housea2/

[9] Cameron, E. (2010*) Impaled upon a thistle: Scotland since 1880*. Edinburgh: Edinburgh University Press, pp. 130-31.

[10] Glendinning, M., MacInnes, R. & MacKechnie, A. (1996) *A history of Scottish architecture from the Renaissance to the present day*. Edinburgh: Edinburgh University Press, p. 386.

[11] Ibid.

contemporary re-interpretation of Scotland's national past – a romantic vision enhanced by nineteenth century literature such as that of Sir Walter Scott. This emphasised a halcyon, 'Scottish Renaissance' of baronial architecture, which tried to determine the very code of 'Scottishness'. The latter was driven by an international, outward-looking Beaux-Arts approach, employing a logic and rationalism of structure and planning. This applied predominantly to Glasgow and the West of Scotland, as demonstrated, for example, by the commercial work of Burnet, Tait & Lorne in Glasgow.[12]

In housing, a degree of experimentation with some of the more idiosyncratic tendencies of continental modern had led to experimentation with the white, flat-roofed house in a suburban context – exactly the 'sheer bunkum' so reviled by Leslie Grahame Thompson.[13] However, despite a reluctance to stomach such a radical departure from the red sandstone cliffs of the Victorian city, this variety of low-rise suburban housing made financial and material sense due to a post-war lack of construction materials. However, more than that, a painful lack of skilled craftsmen had been a contributory factor in the direction taken in building construction and hence design. The number of qualified stonemasons, for example, had plummeted to virtually none during the course of the decades since the turn of the twentieth century, often pointing to a more economical use of brickwork, which was sometimes rendered.[14]

The use of white rendered, geometrically reductive design in Scottish architecture was not, of course, such an unseemly proposition. Charles Rennie Mackintosh, had used it with verve and imagination on villas such as Windyhill, and eastern 'Traditionalist' architects such as Reginald Fairlie created serene and spiritual outposts like the Church of Our Lady Star of the Sea at Tayport. Given this, Gillespie, Kidd & Coia should have experimented with this smooth white, highly geometrical aesthetic on the Roman Catholic Pavilion at the Glasgow Empire Exhibition in 1938, is not particularly surprising. It also came a decade after well-known examples of modern ecclesiastical design connected to the Liturgical Movement, which would gain in momentum over the middle decades of the twentieth century – such as Rudolf Schwarz's Corpus Christi, Aachen, not to mention Italian parallels later in this study.

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[12] Glendinning, M., MacInnes, R. & MacKechnie, A. (1996) *A history of Scottish architecture from the Renaissance to the present day.* Edinburgh: Edinburgh University Press, p. 387.

[13] Watters (2016) *St. Peter's, Cardross birth, death and renewal.* Edinburgh: Historic Environment Scotland in association with NVA., p. 21.

[14] Glendinning, M., MacInnes, R. & MacKechnie, A. (1996) *A history of Scottish architecture from the Renaissance to the present day.* Edinburgh: Edinburgh University Press, p. 386.

In the context of the pre-war, International Style,[15] Crinson and Lubbock argue that the British concentrated on 'the moral and technological interests' of modernism, which lent themselves to the concept of town-planning, and of the comprehensive powers of the Welfare State, which would come into effect after the War.[16] In Scotland, the Second World War necessitated a renewed need for national reconstruction; again, large-scale – and innovative – housing was needed to repair wartime damage and to overcome material shortages. In tandem with this, the radical planning strategies proposed for large cities such as Glasgow, the (aborted) Bruce Report (1945) and implemented Clyde Valley Plan (1946) by Patrick Abercrombie and Robert Matthew, looked to the ideology of modernism to enact such wholesale change to the city's physical fabric.

By the 1950s, modernist definition had opened up to include less mechanistic ideas, developed in reaction to the International Style. One such form derived from Swedish architectural design principles and had been discussed in architectural journals such as *The Architectural Review* and *Architectural Design* during the war. The 'New Empiricism' to a degree added a previously absent humanising dimension to functional architecture.[17] Later that decade, to a large extent influenced by Le Corbusier's experimental use of monolithic concrete with unfinished surfaces, Brutalism grew from a dissatisfaction with the pre-war restrictive tenets of the international Modernist organisation, *CIAM*[18]*,* into a similarly didactic organisation, *Team-X,* which included Peter (1923-2003) and Alison Smithson (1928-93), Ralph Erskine (1914-2005), and Aldo van Eyck (1918-99). In its post-war context, the group focused more on the user and on place-specific concerns.

However, by the 1960s, as in other nations, Scotland began to witness an erosion of confidence in the severe architectural manifestation of modernist philosophies, in favour of less formally dictated versions. This manifested itself as a range of 'pluralist' opportunities, be they rationalistic or more overtly formal. The fundamental ideology of modernism, however – the focus on 'community', still held true.

In ecclesiastical commissions, the twentieth century was defined not only by a changing architectural discourse, where tradition and modernity were at times in contention, but also a religious context in a state of flux.

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[15] Crinson and Lubbock define modernism as *an antagonism to ornament and style, yet a love of abstract forms; a rhetorical adherence to industrial imagery, industrial means of production and new materials…..a fascination with what were considered the peculiar conditions of modernity, particularly the flux of change; a dislike of the patterns, physical or conceptual, of custom and tradition and instead an appeal to the natural, to the new, and to universalism; an approach to design that believed every problem was best solved anew using rational principles rather than empirically or by the use of formal precedents; and finally a desire to use architecture actively to change and redeem society.* See Crinson, M. and Lubbock, J. (1994) *Architecture, art or profession? Three hundred years of architectural education in Britain*. Manchester: Manchester University Press., pp. 90-91.

[16] Ibid., p. 91.

[17] Bullock, N. 2002) *Building the post-war world*, *modern architecture and reconstruction in Britain.* London: Routledge.

[18] Congrès Internationaux d'Architecture Moderne

Religious context

Between the end of the war in 1918, and the close of the Second Vatican Council in 1965, the work of Gillespie, Kidd & Coia, and indeed the work of other Scottish Catholic practices, can be set against conscious institutional renewal of the Catholic community in Scotland. This occurred in a variety of areas including piety, politics and the notion of national identity. As Clifford Williams asserts, 'no single grand project' was proposed for the re-assertion of the faith in Scotland, but instead it was promoted by a mixture of methods and organisations that sought to increase Scottish Catholic identity. The linked actions of the Catholic community in Scotland was not an isolated movement, but rather one which was pan-European; even worldwide, which had as its aim the countering of the prominent secular ideologies of liberalism, socialism and communism.[19] In particular, the threat of communism was something which Pius XI (1922-39) had personally experienced during his tenure as Apostolic Visitor and Nuncio to Poland from 1918-21,[20] remaining in the country despite the threat of a Bolshevik attack.[21] As well as an increase in Catholic presence, particularly in Scotland, a parallel movement involving the specific doctrine of the Roman Catholic liturgy unfolded over the course of the twentieth century, via the Liturgical Movement. 'The liturgy' is encapsulated in the activity of Christians gathered together as a worshipping community, and as Charles Davis asserts, the church is a place that facilitates this activity.[22] The Roman Catholic liturgy in its alternative forms and in its expression, gesture, movement and theatricality affected the disposition of certain spaces or fixtures within a church as they related to various aspects of Catholic ritual. It can be argued that the church building is required to mediate between the functional or physical, and the experiential or ritual aspects of a worshipping community.

Forms of the Mass

The liturgy of the Mass had been celebrated for well over a millennium at the time of the Second Vatican Council. In 1570, at the Council of Trent, in addition to addressing the

[19] Williamson, E., Riches, A., and Higgs, M. (eds.),The Buildings of Scotland: Glasgow. London: Penguin Books

[20] Aradi, Z. (1958) *Pius XI the Pope and the man*. New York: Zsolt Aradi. pp. 90-116.

[21] Kelly, J. and Walsh, M. (2005) *Oxford Dictionary of Popes*. 2nd ed. Oxford: Oxford University Press, p.321.

[22] Davis, C. (1962) 'Church architecture and the liturgy.' *In* Hammond, P. (ed.) *Towards a Church Architecture*. London: The Architectural Press, p. 107.

Protestant Reformation, Pius V (1566-72) issued a missal relating to the form of the Latin Rite or Tridentine Mass that strictly standardized the ritual. Although this form of the Mass had been conducted since the papacy of St. Gregory the Great (590-604 AD), many alterations had been applied to the calendar of feasts by the addition of saints' days. The sixteenth century revised form featured a strict set of rubrics, which required full adherence by the entire Western Roman Catholic Church.

The Tridentine Mass survived as the only official version until the changes that issued from the Second Vatican Council. In 1969, Paul VI (1963-78) introduced a new version of the Mass, the Novus Ordo, which differed from the Tridentine Mass in a number of ways. Most of the principal differences relate to the relationship between the laity, the priest, and the altar, and some of these differences manifested themselves in the physical re-arrangement of space within the church, whereas others were more evident in the written word and in the actions of participants.

One of the most obvious changes concerned the direction in which the priest faced. At the Tridentine Mass, all people present – priest and congregation – would be positioned *ad orientem*. ie. towards the altar, and hence to the East. Emeritus Pope, Benedict XVI, later summarised the significance of this action:

The common turning toward the east was not a "celebration toward the wall"; it did not mean that the priest "had his back to the people": the priest himself was not regarded as so important. For just as the congregation in the synagogue looked together toward Jerusalem, so in the Christian liturgy the congregation looked together "toward the Lord."[23]

The Novus Ordo permitted a complete reversal of this, instead allowing the priest to face *versus populum* - towards the congregation. This consequently had an impact on the altar itself. Traditionally, one high altar was placed against the rear (East) wall in accordance with the direction in which the priest was facing. The Novus Ordo necessitated the inclusion of a second, lower altar in the middle of the sanctuary, across which the priest could address the congregation. A further change involved the distinction of the sanctuary from the nave. In churches designed for the Tridentine Mass this distinction was overt, in the inclusion of an altar rail. This clarified the perception of the sanctuary as representative of Heaven in contrast to the remainder of the church which itself was

[23] Ratzinger, J. (2007) 'Spirit of the Liturgy.' *Sacred Architecture*, (13), p. 2.

symbolic of Earth. Following the institution of the Novus Ordo, many existing altar rails were removed, and new churches built without them.

In relation to these physical changes and to those of spatial perception, the laity were affected in a number of ways. Communion at the Tridentine Mass involves the communicant kneeling at the altar rail. This clearly cannot be performed without such an installation. Further changes included the participation of people other than the priest, in the Mass. In the Tridentine form, altar servers are boys, with the implication that they were being prepared for the priesthood. By contrast the Novus Ordo, in line with its pastoral emphasis (priests were described in the Sacrosanctum Concilium as 'pastors of souls'), permitted girls to perform the same task if agreed by the bishop. The Mass itself is traditionally celebrated in Latin, but again for reasons of pastoral inclusion, Paul VI allowed it to be performed in the vernacular tongue. However, it was always intended that Latin would still be the modus operandi, even in the new form. These exceptions to the normal method of carrying out the Mass extended to the participation of the laity in other ways. The communication of the Word and the distribution of Communion traditionally had been the sole preserve of the priest, but again, the Novus Ordo allowed the laity to be involved to a greater degree, for example in reading and in the administration of Communion. Again, the default method of delivery of these offices remained with the priest.

In terms of active participation of the congregation during the Mass, the Tridentine version required their silent participation in prayer and in the following of missals, while participating vocally in entrance, exit, and sometimes Communion hymn singing. Similarly, verbal responses were made by clergy or altar boy, whereas the Novus Ordo invites the congregation to respond verbally. The Sacrosanctum Concilium decrees that 'it is their (the priests') duty also to ensure that the faithful take part fully aware of what they are doing, actively engaged in the rite and enriched by its effects'.[24]

It also states that the faithful should be led to that 'fully conscious and active participation in liturgical celebrations'.[25]

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[24] Vatican Archive. (1963) *Constitution on the sacred liturgy Sacrosanctum Concilium solemnly promulgated by his holiness Paul VI on December 4, 1963; article 19.*[Online] [Accessed 2 nd May 2015] http://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat- ii_const_19631204_sacrosanctum-concilium_en.html

[25] Vatican (1963) *Constitution on the sacred liturgy Sacrosanctum Concilium.* [Online] [Accessed on the 2nd July 2017] http://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_const_19631204_sacrosanctum-concilium_en.html

The standard form of music that accompanied the Tridentine Mass is Gregorian chant, which again is the standard for the Novus Ordo, although the new form has also permitted numerous other types of music to accompany the Mass.

Finally, the end of the Mass differs according to its alternative versions. While both versions emphasise the incarnation of Christ in the Last Gospel (the Gospel according to St. John), the Novus Ordo re-orders the conclusion of the Mass with a blessing and then the dismissal (which requires a response from the congregation), whereas the Tridentine form delivers the dismissal before the blessing, after which the Last Gospel is read.

The Novus Ordo also makes provision for the building of new churches, although its ambiguity allowed many forms of architectural translation:

And when churches are to be built, let great care be taken that they be suitable for the celebration of liturgical services and for the active participation of the faithful.[26]

The Tridentine Mass and the Novus Ordo differ somewhat in the interpretation of the Mass. In the single directionality of the Tridentine form, the priest can be thought to face God with the congregation, but with a sense that he is acting on their behalf. In contrast, hierarchically, the Novus Ordo engenders a more emphatic recognition of the congregation as a distinct body with the priest as the focus of attention. Organisationally, the spatial manifestations of axiality and symmetry are quite important in the Tridentine Mass, as they reflect its highly prescriptive nature. The Novus Ordo, however, had more freedom to alter the traditional ritualistic and processional underpinning of a church building, combining a modern architectural aesthetic with liturgical change.

The Liturgical Movement

As Purdy acknowledges, spatially the spirit of the Counter-Reformation could be found in the singular spaces of Jesuit churches such as the Church of Il Gesu in Rome (1568-75), with clear sight lines to the high altar and pulpit and side-chapels for individual use clearly connected to the principle liturgical space.[27] In the nineteenth century, this clarity of visual

[26]Vatican (1963) *Constitution on the sacred liturgy Sacrosanctum Concilium.* [Online] [Accessed on the 6nd July 2017] http://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_const_19631204_sacrosanctum-concilium_en.html

[27] Purdy, M. (1991) Churches and chapels: a design development guide. Oxford: Butterworth Architecture, p. 13.

and auditory communication was disrupted by a plethora of stylistic choices during the era of historicism. Spatial concerns were effectively subordinated by the details of a particular style, and the building of new churches after Catholic emancipation ranged from the relatively anonymous to the outright flamboyant, with a range of influences including Early Christian, Renaissance, Baroque and Gothic.

However, at the start of the twentieth century, the use of historical forms began to be countered by renewed thinking in the use of historical forms in art. These forms began to be rejected in favour of use of the 'living form', considered to be more compelling, as underlined by Henry van de Velde (cited in Jedin & Dolan[28]), who argued that

The most essential, most indispensable requirement to assure the beauty of an art work is the life which radiates from the material in which it is created

Such changes came later to church architecture than to secular, mainly due to limiting, institutional guidance from the Church. For example, *CIC Fontes* argues that (while some stylistic familiarity was still encouraged) in 1912 the Archdiocese of Cologne advocated the use of the 'Romanesque, Gothic transition-style' as appropriate architectural vocabulary for church design.[29] Additionally the sheer power of tradition, allure and mystery of architectural elements such as the semi-circular apse, basilican processional forms and stained glass remained strong.

Initial signs of a thawing of traditional conceptions of ecclesiastical design arose after 1900 in the increasing spotlight on the functionality of liturgical space; that is , the space required for ritual liturgical observance including preaching and carrying out the sacraments. The concept of the liturgy as the architect of the church gathered pace following art historian Cornelius Gurlitt's vocalisation of this idea after 1896. This tenet was strengthened by the Protestants at the Second Church Architecture Convention in Dresden in 1906, and became the primary concern of the simultaneous Liturgical Movement, which gained credence in the wake of the reforming tendency of Pius X (1903-14)[30] and concerned amongst other changes, a more active participation of the congregation.[31] Following Pius X's reforms, the emphasis on active participation was

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[28] Bandmann, G. (1981) 'New art forms.' *In* Jedin, H. and Dolan, J. *History of the church IX: the church in the industrial age*. London: Burns & Oates, p. 302.

[29] Ibid.

[30] Ibid.

[31] Martimort, A. (1983) *The church at prayer: volume 1: principles of the Liturgy*. Paris-Tournai: Desclée. p.74.
Pius X even encouraged the participation of children in the liturgy, so long as they were of a suitable 'age of reason'.

furthered enthusiastically in Belgium in the 1910s through the ideas and campaigns of the Benedictine monk, Lambert Beauduin (1873-1960),[32] at Mont-César in Flanders, where his aim was to engage the faithful in their significant numbers. Then, at another Belgian abbey – that of Saint-André, Bruges, similar ideas were advanced through the missal of Dom Gaspar Lefebvre. In France, shortly after the First World War, a Jesuit priest named Fr. Paul Doncoeur made the liturgy accessible to the young through the use of the dialogue Mass, whilst simultaneously, the Sulpician, Pierre Paris, would make teachers of Christian university graduates. The movement developed almost contemporaneously in Germany, and permeated the influence of the theologian Romano Guardini (1885-1968), and through the monk Dom Odo Casel (1886-1948) at the Abbey of Maria Laach in the Rhineland.[33]

As the Liturgical Movement developed in Germany during the interwar period, Guardini, and the Gladbeck clergyman Johannes van Acken, were particularly influential. As Stegers suggests, the reforming nature of the Liturgical Movement may have barely affected architecture at all without van Acken's 1922 manifesto, *Christozentrische Kirchenkunst. Ein Entwurf zum liturgischen Gesamkunstwerk.*[34] The impassioned ideas within this work were designed to reform ecclesiastical design and culminated in a new spatial design for celebrating mass. Van Acken posited a number of proposals to the spatial constituents and liturgical objects within the church. These proposed the dissolution of the separation between presbytery and laity. Spatially van Acken's ideas centralised altars, whether the church be laid out in an axial or radial arrangement, with spatial organisation and artistic decoration and lighting entirely focused on it, and altered the position of the priest to face the congregation. He proposed that the nave should be a clear space free from obstructions such as columns, side aisles reduced to circulation space to access pews, and that choirs be made shorter and wider. In terms of the church's liturgical constituents, van Acken suggested that altars be detached from the rear wall and repositioned beneath the crossing in an elevated fashion, and defined by a rail

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[32] The Tablet (1960) *Dom Lambert Beauduin an apostle of reunion.* 6th February. [Online] [Accessed on 25th March 2015]
http://archive.thetablet.co.uk/issue/6th-february-1960/21/12272#scanned

[33] Jounel, P.. (1983) 'From the Council of Trent to Vatican Council II.' *In* Martimort, A. (ed.) *The church at prayer: volume 1: principles of the Liturgy*. Paris-Tournai: Desclée., pp. 63-84.

[34] Stegers, R. (2008) *Sacred buildings: a design manual.* Basel: Birkhäuser Verlag AG.
Translated as *Christocentric Ecclesiastic Art. A Proposal for Liturgical Gesamkunstwerk*, p. 20.

with its position demarcated from above by a baldacchino or circular chandelier.[35] The Liturgical Movement (and long before Gillespie, Kidd & Coia) sowed the seeds that would blossom through the resolutions of the Second Vatican Council, some forty years later.

During the Second World War, the Liturgical Movement was understandably affected in Germany by the rise of National Socialism. Meanwhile in France advances were made through the theological, biblical and pastoral initiatives of the Centre Pastorale Liturgique, founded in Paris with the backing of Lambert Beauduin. The publications, personalities and discussions connected to this would effectively pave the way for the subsequent Vatican-driven reforms in France.[36]

Following the war focus shifted to matters of a more fundamental nature connected to a partial use of the vernacular tongue in the Mass. Pius XII (1939-58) continued and expanded the work of his predecessor, within a new post-war climate. Initially the main objective was to make the existing liturgy more accessible to the people, along with the promotion of Gregorian chant within it. He was soon in broad support of the Liturgical Movement, contributing his own directives to it in 1947. These included a commission with the objective of preparing a general reform of the liturgy, and his Encyclical, *Mediator Dei*, the authoritative charter of the Liturgical Movement, which is closely linked to the German movement and incorporates its principal objectives, commonly referred to as the 'directives of the German Liturgical Commission'. This was drawn up by the liturgical scholar, Dr.Theodor Klauser in collaboration with the commission appointed in 1940 by the catholic hierarchy in Trier. The document comprises a short statement of the theological and liturgical principles, which should govern the design of all (Catholic) churches, followed by 21 conclusions, in which some of the architectural implications of these conclusions are drawn out. This was, therefore, an important document, which influenced post-war design in Germany[37]. This was a significant moment in the story of twentieth century liturgical reforms in the Roman Catholic Church as it had a universal effect, at least to some degree. Pius XII sanctioned a gradual rather than widespread use of the vernacular, given a new focus on the Word of God in the liturgy. In the immediate

[35] Stegers, R. (2008) *Sacred buildings: a design manual.* Basel: Birkhäuser Verlag AG., p. 20.

[36] Jounel, P.. (1983) 'From the Council of Trent to Vatican Council II.' *In* Martimort, A. (ed.) *The church at prayer: volume 1: principles of the Liturgy*. Paris-Tournai: Desclée., pp. 63-84.

[37] An English translation was published in the American review, *Worship*, in December 1949, and was subsequently re-printed as a pamphlet. Hildegart Nicholas then revised and re-translated the text in 1955.

pre-Vatican II years, he simplified the rubrics of the breviary and established a code of rubrics which was then promoted by John XXIII in 1960.[38]

The effect of the German development of the Liturgical Movement on the Roman Catholic Church as a whole was significant. Spatially and functionally this made a significant impression as new churches were ordinarily for community use, in contrast to medieval church types often associated with monastic use and therefore primarily concerned with choral use and less focused on auditory and visual connection with the altar from the perspective of the congregation.

Writing in *Towards a Church Architecture* in1962, Charles Davis asserts that various plans and architectural forms had been developed in "the new churches abroad", with the purpose of actively including the congregation in the participation of the Eucharist. He both acknowledges the importance of these churches and advocates their study. He refers to the changes anticipated from the Second Vatican Council, concerning the reading of the liturgical proclamation in Latin and then in English, from the altar:

In all probability, this will be changed when the coming Council reforms the liturgy. The priest will not be at the altar for the liturgy of the word; he will proclaim the word to the people in their own language from an ambo.[39]

Indeed, the principle given in the German Directives is that the priest at the altar should be seen and heard from the furthest members of the congregation, unaided, and that the communion could be carried out without disturbing the Mass. The physical size of the church building should be sympathetic to this and should not exceed it except in the case of a cathedral or large pilgrimage church.

In accordance with these aspects of the liturgical movement was the parallel general architectural theory such as that discussed by architectural historians such as Nikolaus Pevsner and Sigfried Geidion where importance was placed heavily on function, material and construction.[40] According to Aubert et al., the turn of the century artistic and religious

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[38] Jounel, P.. (1983) 'From the Council of Trent to Vatican Council II.' *In* Martimort, A. (ed.) *The church at prayer: volume 1: principles of the Liturgy*. Paris-Tournai: Desclée., pp. 63-84.

[39] Davis, C. (1962) 'Church architecture and the liturgy.' *In* Hammond, P. (ed.) *Towards a Church Architecture*. London: The Architectural Press, p. 121.

[40] Pevsner argued that 'The Modern Movement in architecture, in order to be fully expressive of the twentieth century, had to possess both qualities, the faith in science and technology, in social science and rational planning, and the romantic faith in speed and the roar of machines.' See Pevsner, N. (1949) *Pioneers of modern design from William Morris to Walter Gropius.* 2nd ed. London: Penguin Books, p.210.
Geidion described 'constituent facts' and 'transitory facts'; where constituent facts are the recurring threads in architecture which agglomerate to form a 'new tradition'. Transitory facts', on the other hand, are the impermanent art forms that are

reform stemmed from the ability to consider the liturgy as an 'organic entity' – a way of thinking that had been permitted by the development of perceptual psychology in the nineteenth century. In architectural terms, this meant that the quality and effectiveness of the final form were no longer considered dependent on validation by history. Increasingly, reliance on historical borrowing was discouraged, as had been the case with the Gothic styling of Liverpool's Anglican Cathedral, which Gurlitt notes had been criticized for employing such narrowly considered conventions[41]. The reason for this was not historical allusion per se but the use of new building materials and construction techniques. A number of examples of churches which used up to date materials in their construction such as iron and reinforced concrete were viewed as progressive accomplishments due to financial prudence and constructional efficiency, even though they were fundamentally buildings expressed in the Gothic idiom. In 1923, Auguste Perret furthered innovative constructional approach at Notre Dame de Raincy, a celebration of industrial-looking reinforced concrete very much on show.[42]

According to Stegers, a 'rift' has developed since the architectural pursuance of Modernism between a genuine religious experience and its aesthetic, built manifestation[43]. This view is highlighted in layout and other design terms by the views of the contributors of *Towards a Church Architecture*, and were probably coloured by the new spirit of ecumenism and the impending changes to the liturgy. Certainly, as Proctor notes, the views of Peter Hammond were shared with the NCRG,[44] the writings of whom contributed to the climax of the Liturgical Movement. In his criticism of modern churches, Hammond focuses on the need for church design to be based on genuine social and liturgical principles and not merely on aesthetic contrivances. This recognition of the fundamental reason for building a church is illustrated in the work of Schwarz, whose early churches are based on the precept that a church is foremost a building for housing a community, placing an emphasis on the liturgical needs of the people and not on the fabric of the building in which they were housed.

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unlikely to provide answers to the specific issues of a time period. See Geidion, S. (1967, reprinted 1974) *Space, time & architecture.* 5th ed., Cambridge, Massachusetts: Harvard University Press, p. 18-19.

[41] Bandmann, G. (1981) 'New art forms.' *In* Jedin, H. and Dolan, J. *History of the church IX: the church in the industrial age*. London: Burns & Oates, p. 303.

[42] Bandmann, G. (1981) 'New art forms.' *In* Jedin, H. and Dolan, J. *History of the church IX: the church in the industrial age*. London: Burns & Oates, pp. 303-304.

[43] Stegers, R. (2008) *Sacred buildings: a design manual.* Basel: Birkhäuser Verlag AG, p.9.

[44] New Churches Research Group

Although by the mid-1920s, architecture and theology had begun to be linked, the fundamental principles of the liturgy, or the *ecclesia,* rather than the building that enveloped it. Indeed, Peter Hammond's view was for those involved in the building of new churches to first

forget all about architecture and to study the anatomy of Christ's body, the structure of the temple built of living stones.[45]

The idea that the church is foremost concerned with its liturgical activities was recently echoed in the views of the Bishop of Salford, Rt. Rev. John Arnold, on the fate of Georg Mayer-Marton's crucifixion mosaic installed at the Holy Rosary church, Oldham. These underline the primacy of the liturgy and involvement of the laity over attachment to specific stylistic or artistic work or building:

I think it is important to remember that, in his ministry, Jesus never made any associations with buildings. His ministry was never tied to a particular place. [46]

Study structure

Set against these changing contexts, the work of the firm as a whole requires an account of its wider institutional history, investigation into its continued relationship to the Church, analysis of its ecclesiastical buildings, and comparison of its oeuvre with other sources. These concerns translate into the three strands of investigation that will help to structure the thesis, *practice, architecture,* and *parallels.*

Practice examines the context of the business and its key client, in two sub-sections. The first deals with the institutional history and staffing of the firm in terms of the wider professional and academic context of Glasgow; and the second, the patronage context under which the firm operated, which was connected to interwar social depression and Church-led social initiatives.

[45] Hammond, P. (1962) 'A radical approach to church architecture.' *In Towards a church architecture.* London: The Architectural Press, p. 18.

[46] Pepinster, C. (2017) 'Church closure threatens masterpiece by Jewish artist who fled Nazis.' *The Guardian.* [Online] 26th February [Accessed on 22nd June 2017] https://www.theguardian.com/world/2017/feb/26/mosaic-church-oldham-demolition-georg-mayer-marton-postwar-artist

The first sub-section considers the establishment of the practice of Gillespie, Kidd & Coia to its close. The beginning of the modern practice in 1927 can be seen within the wider context of the practice's previous incarnations. These note its achievements in the academic and professional context within which the firm developed, and the interests of its key personnel and associates.

The practice of James Salmon (1805-88), was established in 1825, but later permutations of the firm describe more relevant considerations, with the work of James Salmon Jr. (1873-1924) and John Gaff Gillespie (1870-1926) of more immediate interest; not, however, due to any overt Roman Catholic connection between earlier practice and the later experimental work of Gillespie, Kidd & Coia. Salmon (Senior), Salmon (Junior), Kidd, and Gillespie are not known to have been practising Roman Catholics,[47] neither were they found to have had a relationship with the Roman Catholic Church that might have laid the foundation for Coia's subsequent engagement with it, after taking responsibility for the running of the firm following Kidd's death. By contrast, they did undertake a number of ecclesiastical commissions, which included new buildings, alterations and additions, and a successful competition entry to design the Lloyd Morris Memorial Church, Glasgow.[48] However the firm operating under the partnership of Salmon Jr. and Gillespie, are linked to the later practice through pioneering material technology used to construct Lion Chambers, Glasgow, and through collaboration with a group of sculptors from the Glasgow School of Art at work to 22 Park Circus, Glasgow.

The academic links to the Glasgow School of Architecture, formed from its parent institutions of the Glasgow School of Art and the Royal Technical College, is a recurrent theme in the history of the practice. Jack Coia trained there, learning his trade under a Beaux-Arts curriculum. He later taught and employed apprentices trained there, some of whom held active editorial roles in School publications and were linked to progressive views on modern architecture. Coia himself had re-invigorated an established practice, taking it in a new direction as its sole surviving partner.

From the first church commission, St. Anne's, Dennistoun, in 1931, we can discern distinct chapters of architectural output from the office, representing the contributions of its numerous architects and other associated employees, and their academic collaboration with artists and craftspeople over a period spanning five decades. In its most recognisable

[47] They all became partners in the firm and were responsible for its continuation in its various iterations
[48] Dictionary of Scottish Architects 1840-1980. (2016) *William Forrest Salmon*. [Online] [Accessed on 2nd May 2016]
http://www.scottisharchitects.org.uk/architect_full.php?id=200030

form, the business had existed from 1927[49] until 1987, with the most recent period, post-1957, widely distinguished from the preceding era by a perceived change in direction of the practice's driving design philosophies following the building of the small parish church of St. Paul in Glenrothes New Town, Fife in the same year.

Throughout the 1930s the firm impacted on the ecclesiastical scene in the City of Glasgow and in neighbouring towns, perhaps in a way that had not been known (save for a limited number of other examples such as Ménart's St. Aloysius, Glasgow) since the restoration of the Archdiocese of Glasgow in 1878.[50] While the practice's first churches may have exhibited relatively conventional plan forms, in section they were eccentric and experimental, as will be demonstrated through analysis of the design work of architects practising within a similar period to Coia.

The practice developed over a number of distinct phases. Their work, when considered holistically, appears as an enthralling four-part drama. The first recalls their early success following Jack Coia's engagement of the Archbishop of Glasgow in 1931. Subsequently, wartime unsettlement and the personal hardship of Coia during these years and his later re-emergence on the local scene with a kinder transport refugee as his assistant, defines the second. The third saw Coia, though perhaps bruised from the adverse effects of war, fight back with a re-invigorated practice and a long series of churches that laid the immediate foundations for the fourth and final act - where Coia, and by association, the other members of the firm were honoured, and Metzstein and MacMillan were adopted into the modernist fraternity.

This sequenced development of the practice allowed for one of its most important assets. Gillespie, Kidd & Coia were fundamentally an architectural practice whose ability to produce a substantial amount of design work over a long period of time was a function of the employment of a large number of architects, assistants and apprentices, active in the academic pursuit of ecclesiastical design, appropriate to the social and liturgical ruptures of the twentieth century. However, complete clarity surrounding the exact attribution of their design work is sometimes difficult to discern; a 'disputed subject in architectural history', as Diane Watters concedes in her recent book, *St. Peter's, Cardross: birth, death*

[49] 1927 was the year in which William Kidd invited Jack Coia back to the firm from where Coia had been apprenticed in 1915, and where Kidd and the recently deceased John Gaff Gillespie had been partners.

[50] No non-Roman Catholic religious commissions were carried out in the 1930s.

and renewal. [51] To some degree the firm's later reputation and international status emphasises Isi Metzstein and Andy MacMillan, who only worked for the practice from 1945 and 1954 respectively, and downplays the value of the senior partner, Jack Coia, who won the RIBA Gold Medal in 1969.

The firm's churches display a series of different influences relating to twentieth century architecture in an eclectic manner. This can be related to the interests of personnel employed by the firm at the time and cannot be connected solely to the result of any single corporate driving ambition. At points during the 1950s and 1960s, the influence of international architects such as Le Corbusier became clear, but preceding and following this, a series of other influences were at play. This eclecticism represents the contested nature of the authorship of this work. As such, in recent years they have tended to be portrayed as a fractured practice with compartmentalised and disconnected design phases, with particular focus placed on a late phase of practice considered to be at the forefront of the development of a British regional modernism.

Post-war work including St. Paul's, has been praised for appearing to challenge the prevailing trend of conventionally designed churches, ushering in a 'new era' in the sphere of ecclesiastical design in Britain.[52] However, since the exhibition and publication of the 2007 exhibition, Gillespie, Kidd & Coia: architecture 1956-1987, some architectural historians have suggested a more nuanced reading. Watters, for example, concludes that the novel value of such buildings was underpinned less by the 'first principles' of a renewed understanding of the liturgy, a concept encouraged by the vocal figure of Rev. Peter Hammond (1921-99) of the New Churches Research Group[53], as by more formal means brought about by economical design methods.[54] Notwithstanding, earlier church commissions have received less praise and have been described in design terms as 'of

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[51] Watters (2016) *St. Peter's, Cardross birth, death and renewal.* Edinburgh: Historic Environment Scotland in association with NVA, p. 42.

[52] Rodger, J. (2007) 'Towards the MacMillan and Metzstein years.' *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987*. Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City, p. 8.

[53] Hammond, P. (1962) 'Foreword.' *In Towards a church architecture*. London: The Architectural Press. p. 9.

[54] Watters (2016) *St. Peter's, Cardross birth, death and renewal.* Edinburgh: Historic Environment Scotland in association with NVA, p. 53.

their time', a surprisingly ambiguous phrase which appears to offer little value to the observer in terms of measured, analytical criticism. [55]

Prompted by such sentiments, this thesis questions the chronological separation of Gillespie, Kidd & Coia's church commissions. In the absence of the creation of the 'detailed monograph' recently suggested by Watters[56], it discusses a large number of their ecclesiastical schemes. It will attempt to discover whether an analytical interrogation of their churches reveals – apart from the published differences in the various phases of their practice – similarities or constancies that extend our knowledge and understanding of their work, and through study of parallel architectural practices, of their standing as an international design practice.

Building analysis alone, however, belies a true appreciation of the firm's complexity. A number of factors contribute to its understanding, including the length of time during which it was in existence, the various architects present within the practice, the array of individuals comprising the institutional client body, and the large number of ecclesiastical buildings designed.

The second sub-section documents the patronage context under which the practice developed. It considers both a parallel field of church design in Glasgow, as well as the relationship that the Roman Catholic Church enjoyed with practices such as Gillespie, Kidd & Coia during a period of social and theological transition.

After William Kidd died in 1929, the 31-year-old Coia inherited a practice that was in desperate need of fresh work if it was to survive. Gillespie, Kidd & Coia continued, and although they accepted diverse project types including schools, hospitals and residential schemes, it was the large number of commissions from their greatest patron – the Roman Catholic Church, specifically the Archdiocese of Glasgow, that would ensure the firm's longevity. Moreover, an intrinsic link between the Church and the practice would establish itself, owing to the remarkable design development of the buildings commissioned.

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[55] Rodger, J. (2007) 'Towards the MacMillan and Metzstein years.' *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987.* Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City, p.15.

[56] Watters (2016) *St. Peter's, Cardross birth, death and renewal.* Edinburgh: Historic Environment Scotland in association with NVA,, p. 53.

The close relationship that the practice enjoyed with the Church, and the particular rapport that Gillespie, Kidd & Coia cultivated with the Archbishops and other clergy is worthy of a fuller understanding. In 1931, Jack Coia's first meeting with Archbishop Donald Mackintosh, leading to the firm's first church commission, was concurrent with Coia's period of teaching at the Mackintosh School of Architecture. The locational convenience of the Glasgow School of Art to the administrative headquarters of the Archdiocese was not lost on Coia. As Rogerson informs us, he 'called on the Archbishop of Glasgow whose office was across the road from the School of Art in Renfrew Street where he taught at the time'.[57]

Surprisingly little contextual information has been referred to regarding Coia's meeting with the Archbishop, especially the apparent suddenness with which commissions began. Underpinning Rogerson's description of the first commission 'rewarding' Coia's approaching of the Archbishop,[58] discussions between the pair were set against a context of religious and social reform. In doctrinal terms, the Roman Catholic Church resolved to implement the renewed vision of Catholic culture in Scotland,[59] coinciding with John Wheatley's 1924 Housing Act. The result of this would be the provision of new parish churches in areas of new housing.

Architecture aims to apply similar analytical themes to a range of ecclesiastical work in order to determine similarities or changing ideas. It evaluates the firm's individual ecclesiastical building designs in the context of a developing Scottish approach to architectural modernism, concurrent with a theological state of transition, which focused on the integration of the laity to the liturgy.

Although recent interest in St. Peter's College has prompted a closer examination of the firm's contribution to modern British ecclesiastical architecture, Gillespie, Kidd & Coia as an architectural practice was long-lived, beginning in the interwar period at a time prior to

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[57] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p. 18. No.160, Renfrew Street had previously been Archbishop Maguire's house, and by that point had become the address of the Vicar-General, Right Rev. Mgr. Canon William Daly,[57] and presumably the Archdiocesan office.

[58] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p. 18.

[59] Williamson, C. (2016) The history of Catholic intellectual life in Scotland, 1918-1965. London: Palgrave MacMilan, p. 1.

the adoption of international modernist architectural principles in Britain, even in secular architecture. This was, however, a period of gradual transition, in stylistic, constructional and liturgical terms, which is significant in its own right.

An analytical investigation of ecclesiastical space, which in architectural terms has the dual responsibilities of accommodating spatial and ergonomic functionality, and spiritual symbolism, asserted by Kenneth Nugent as the 'embodiment of function and aspiration'.[60] The buildings associated with this type of space - parish churches, chapels and oratories - have been associated with the firm since its inception, and some have received little discussion to date. In architectural terms, most recently architects and historians such as Rodger et al., Rogerson and Watters have contributed to direct understanding of some of the firm's churches through their work, but a detailed comparative study of the practice's 'significant contribution to twentieth century Scottish church design',[61] has not yet been undertaken.

In this study, text-based and illustrative material explores a range of themes viewed primarily from an architect's perspective, dealing with a range of structural and spatial dimensions and drawing terminology. Within the context of the twentieth century, this investigates both architectural design decisions and design responses to a liturgy in flux. The analysis of these buildings is intended to demonstrate that the various phases of Gillespie, Kidd & Coia's church commissions are part of an unfolding body of work, successful because it responded aesthetically to advancing architectural and liturgical theories. As a body of illustrated work, Architecture also serves as the means to compare the Scottish churches with those of other architects, the subject of Part 3.

The final strand of investigation, *Part 3: Parallels*, posits that the practice's ecclesiastical oeuvre paralleled a programme of church building in Rome, rather than in Britain. It employs a case study of contemporary twentieth century churches situated in Rome, which will be used to suggest Gillespie, Kidd & Coia's equivalence to an international design practice thanks to the longevity of practice, number and design of their ecclesiastical schemes.

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[60] Nugent, K. (1994) 'Churches and liturgy.' *MacJournal*, (1), p.30.

[61] Watters (2016) *St. Peter's, Cardross birth, death and renewal.* Edinburgh: Historic Environment Scotland in association with NVA, p. 53.

Apart from the obvious relationship of Scotland's Roman Catholics to Rome through their faith, an intriguing typological parallel between the two cities exists, when during the interwar period, both cities embarked on an intense and varied church-building programme in response to an expanding Roman Catholic population. In Glasgow, a succession of Archbishops oversaw this, and in Rome, similar provisions for new churches were made in a papal *Motu Proprio*, in tandem with an expansion of parishes within the city.[62]

It is hoped that this study will achieve a document in which ecclesiastical buildings associated with Gillespie, Kidd & Coia are discussed in the same detailed architectural terms. Moreover, it is anticipated that in doing so, they will be regarded as an oeuvre, and not only as buildings belonging to a series of autonomous phases.

At the end of the study, an inventory will be found, with detailed descriptions of each Gillespie, Kidd & Coia church commission.

[62] Whether members of the practice, most particularly Jack Coia, and their clients had experienced any of the Roman churches personally is unclear and remains unsubstantiated in documentary terms, however circumstantial, anecdotal information from Coia's daughter recalls her family holidaying in Italy with the Archbishops (discussion in January 2007). At the very least this highlights the high esteem in which client and architect held each other.

Literature Review

A range of books and other material covering varying attitudes and responses to the firm and its background was consulted in the preparation of this study. Much published work contributes to the understanding of the practice, its work and the wider context. As outlined in the Introduction, we now have access to the finer details of much of Gillespie, Kidd & Coia's post-war work, including churches, and the individual contributions and personalities of its different members. With this in mind, the general position of this thesis is to focus on the workings and interests of the collective practice and the experientially provocative qualities of its architecture.

Publications have been interrogated thematically. Although some crossover between themes is inevitable amongst the different works reviewed, they have been organised according to the three-part thematic arrangement of this study. With this in mind, some titles are discussed in more than one section of this review. For example, *Diane Watters's publication, Gillespie, Kidd & Coia and the architecture of post-war Catholicism*, with St. Peter's College as its main subject, was useful in a wider contextual discussion of the practice. It also discusses specific information about the firm's architectural designs. Her later book, *St. Peter's, Cardross: birth, death and renewal*, is an updated version of this. Her work is discussed both in the Practice section, due to its overarching stance on the firm, and also referenced in Parallels, where it forms part of a discussion about parallel practice backgrounds.

Practice examines literature relevant to the life and history of Gillespie, Kidd & Coia, gauging published perception of its history, and of the local and Scottish context in which the practice worked. It also discusses the ecclesiastical background to the firm's work in terms of its client patronage. *Architecture* reviews literature relevant to the practice's ecclesiastical design output at a more detailed building-scale, where written descriptions of individual churches highlight the degree of analysis accorded to this sector of their output. *Parallels* deals with the wider international context of a Scottish architectural firm operating in the in the middle decades of the twentieth century, with the examination of specific Italian parallels. In tandem with this, the liturgical momentum that had been gathering in Europe since the early twentieth century sheds light on trends in ecclesiastical design and manifestations in a Scottish context.

Practice

This section assesses both the wider context within which Gillespie, Kidd & Coia were situated, as well as the organisation itself. The patronage of the firm by its ecclesiastical client base will then be discussed.

The institutional history of Gillespie, Kidd & Coia as an overall narrative of connective corporate history currently appears to be little discussed in published work. This would complement the work of writers who acknowledge sections of the practice's history. Entries for the architectural background of individual architects, in addition to a general history of the firm's previous incarnation as successor to the Salmon and Gillespie architectural dynasty, can be learned from the *Dictionary of Scottish Architects*, while specific examples of their work are discussed in *Architectural History* articles, one of which discusses one of their most technologically innovative works. These articles, by Patricia Cusack and Frank Walker, discuss the innovative concrete constructional system employed at Lion Chambers, Glasgow,[63] and a number of houses by James Salmon (1874-1924),[64] respectively.

Charles McCallum, writing *in Mac Journal One,* also refers to 'Gillespie, Kidd & Coia: The history of the firm', the practice's 19th century origins, and to Jack Coia's own architectural training and early practice, with a focus on the practice's history in the post-war era, and particularly on Coia, Metzstein and MacMillan. Neil Baxter's article, 'Early Coia buildings', in the same publication, highlights Coia and Thomas Warnett Kennedy. This is an authorial article, concentrating on the autonomous design of the 1930s churches.

The 2007 exhibition publication, *Gillespie, Kidd & Coia: Architecture 1956-1987*, by its nature, promotes the later chapter of institutional history. Its specific contribution to Architecture will be discussed in due course.

The background in which Gillespie, Kidd & Coia practiced can be readily understood in Diane Watters' recent publication, *St. Peter's, Cardross: Birth, Death and Renewal* (2016), with many of its themes also appearing in its predecessor, *Cardross Seminary: Gillespie,*

[63] Cusack, Patricia (1985) 'Lion Chambers: A Glasgow Experiment.' *Architectural History*, 28, 1985, pp. 198–211. www.jstor.org/stable/1568532.

[64] Walker, Frank A. (1982) 'Six Villas by James Salmon.' *Architectural History*, 25, pp. 114–165. www.jstor.org/stable/1568416.

Kidd & Coia and the Architecture of Postwar Catholicism (1997). This is important in the context of this study as it consolidates and lays out a number of key themes important in understanding the significance of extensive church-building programmes carried out by architects such as Gillespie, Kidd & Coia. While still contextually relevant, other authors have focused on specific discussion of the background of religion in Scotland[65] or on the actions of Catholic intellectuals in the country in the twentieth century,[66] whereas Watters directly links these topics to an architectural context.

These themes include demographic change in the Archdiocese of Glasgow in the twentieth century, the Church within the context of twentieth century Scotland, in particular national Catholic culture, and the gradual emergence of a Scottish modernist architectural language in church design. Similar themes are also dealt with by other authors, but Watters' interpretation foremost introduces a link between culture, people and their buildings.

Her explanation of key information concerning demographic change and liturgical conservatism within the Archdiocese of Glasgow, along with the gradual adoption of a specifically Scottish modernist architectural language in the early to middle parts of the twentieth century prefigure the book's focus on St. Peter's Seminary, Cardross. This is also important in understanding societal and religious affairs for the study of other aspects of Gillespie, Kidd & Coia's work. Referencing McCaffrey, Roman Catholics in Scotland, Watters' discusses the augmentation of Glasgow's Catholic population due to nineteenth and twentieth century phases of immigration, such that by the beginning of the First World War, the Archdiocese of Glasgow was home to two-thirds of the overall community of Catholics in Scotland.

In architectural terms Watters argues that there were varying national inflections in the design philosophies of interwar and post-war churches, irrespective of religious denomination. 'Traditionalist' responses to ecclesiastical design, with a geographical tendency to the East and Highlands of Scotland, employed a simplified aesthetic, recalling the aspects of the national character of Romanesque, Scots Renaissance or pre-Reformation medieval Gothic. Within this loose grouping, certain original, idiosyncratic examples adopted more overtly modern qualities, such as Gillespie, Kidd & Coia's Roman Catholic Pavilion. She asserts that the white harled and rubble exterior held associations

[65] McCaffrey, J. (2006) 'Roman Catholics in Scotland: Nineteenth and twentieth centuries.' *In* Maclean, C. and Veitch, K. (eds.) *Scottish life and society: Religion.* Edinburgh: John Donald., pp. 170-190.
[66] Williamson, E., Riches, A., and Higgs, M. (eds.),The Buildings of Scotland: Glasgow. London: Penguin Books

both with a Scottish vernacular and, in combination with articulated, strongly geometrical forms, the suggestion of a pathway for subsequent modern ecclesiastical architecture in Scotland. In Ireland, Paul Larmour and Shane O'Toole suggest in their exhibition publication of the work of Liam McCormick how the white-harled sculptural massing of his post-war ecclesiastical work parallels how this may have played out.[67]

In contrast to the Traditionalist persuasions of the East and Highlands, Watters' discussion of the relative modernity of Glasgow and the West lays the foundations for an understanding of a fundamentally academic approach to public architecture, driven initially by J.J. Burnet (1857-1938) and J. A. Campbell (1859-1909), both of whom had trained at the Ecole des Beaux-Arts in Paris. This was characterised by a hierarchical, logical, rational approach to architectural design and in church design, she references the hall-like, unified interiors of churches such as Il Gesu, Rome, with monumental, simplified facades.

In Glasgow a more direct link to the city's Beaux-Arts preference, encouraged by the directorship of Beaux-Arts trained Eugene Bourdon (1870-1916) at the School of Architecture from 1904, followed a number of 'standardised' Pugin & Pugin churches built for the Archdiocese of Glasgow. Watters describes design tendencies in Glasgow during the interwar years in terms of stylistic referencing, plan form and material detailing in overview terms Chapter 2, and certain churches in further detail in Chapter 3, but an all-encompassing account of the firm's church work as a whole is not the purpose of the book.

A history of Scottish architecture from the Renaissance to the present day, by Glendinning et al., contributes heavily to broad-scale contextual knowledge of the architectural direction and sense of national identity in twentieth century Scotland, in Chapter 8, '1914-1960 'By the people, for the people': the traditionalist and modernist visions'. This is achieved by linking architectural thinking as an outcome of substantial political and social changes, in essence a framework for a discussion on modernism. Apart from the 'socially and visually ordered' response to the general 'mood' of a nation in a state of transition from the dissatisfaction of nineteenth century 'eclecticism', and a national melancholy wrought by the First World War, the chapter also highlights occasions where Gillespie, Kidd & Coia may have responded to a new socially-orientated establishment. In the early 1930s new social building schemes including housing, coincided with the beginning of

[67] Larmour, P. and O'Toole, S. (2008) *North by Northwest: The life and work of Liam McCormick.* Gandon Editions: Kinsale.

Jack Coia's church commissions. This is useful in establishing why the churches were commissioned and the types of communities for whom they were built. The chapter also establishes that Coia seemed enthusiastic – even didactic – about a modern vision of Scotland. This is important as it underlines the practice's stance on the renaissance of Glasgow socially, morally and architecturally. Coia (cited in Glendinning et al.[68]) enthused that 'We must encourage them [young people] to help in tackling the new Scotland as a crusade'.

Glendinning et al. are also important in signposting the way in which the firm fits into the wider view of an emerging modernity, and in establishing a concrete academic link to the Glasgow School of Architecture. Here, the authors describe a shift from a commercial Beaux-Arts approach, or international 'white box' form of modernism to a truer understanding of architectural design derived from first principles. That Jack Coia's 'dashing, artistic'[69] approach to design shifted the centre of gravity from the highly structured tradition of Burnet is an important early indicator of the future practice style of Gillespie, Kidd & Coia. *A history of Scottish architecture from the Renaissance to the present day* also indirectly presents an opportunity to consider the firm's wartime activity – a period of time when the practice effectively ceased operations. However, discussion of the material research of Sam Bunton, 'a co-ordinating figure in prefabricated social building'[70] elaborates on the reference to his association with Jack Coia at Clydebank, in Rogerson[71]. Rogerson's acknowledgement of Coia's undertaking of a Town Planning degree at this time, further colours the practice's alignment with an increasingly socially orientated modernity. This may have been an influential period for the practice, given the change in the design paradigm of the practice when work resumed after the War. Coia's familiarity with contemporary and experimental methods of construction, coupled with a dearth of stonemasons, may have caused an inevitable change of aesthetic.

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[68] Glendinning, M., MacInnes, R. and MacKechnie, A. (1996) A history of Scottish architecture from the Renaissance to the present day. Edinburgh: Edinburgh University Press, p.448.

[69] Glendinning, M., MacInnes, R. and MacKechnie, A. (1996) A history of Scottish architecture from the Renaissance to the present day. Edinburgh: Edinburgh University Press, p. 426.

[70] Glendinning, M., MacInnes, R. and MacKechnie, A. (1996) A history of Scottish architecture from the Renaissance to the present day. Edinburgh: Edinburgh University Press, p. 431.

[71] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p.36.

Another key milestone in the relationship of Gillespie, Kidd & Coia to the wider Scottish architectural context, is referred to by Glendinning et al. and was the return in 1953 of Robert Matthew following his appointment as Architect to London County Council. Not only did Matthew encourage the adoption of international modernism in Scotland, but also we are told that through the vehicle of 'planned social provision'[72] he connected academia with private practice, a philosophy that also underlined the approach of Gillespie, Kidd & Coia. On his return to Scotland, Matthew accepted two senior academic appointments, including Chair of Architecture at Edinburgh University, and in 1956, initiated the firm of Robert Matthew, Johnson-Marshall & Partners (RMJM).

The history of the practice itself was portrayed from a very particular viewpoint in the 2007 exhibition, *Gillespie, Kidd & Coia: Architecture 1956-1987,*[73] which contributed to insight to the later work of the firm, following the design and construction of St. Paul's, Glenrothes. The exhibition was an ambitious project undertaken in collaboration between the Lighthouse Centre and the Glasgow School of Art, and had the core aim of "giving the work of one of Scotland's leading 20th century architecture practices the recognition it deserves".[74] The project engendered a dual output; the exhibition of archival material from the practice, and an accompanying publication with contributions from academics from the Glasgow School of Art and others who enjoyed a professional connection with Gillespie, Kidd & Coia.

The exhibition contributed to knowledge of the architectural careers of Isi Metzstein and Andy MacMillan, and focused on their considerable input into the architectural design work of Gillespie, Kidd & Coia. This highlighted the need for further work on the contextualisation of Metzstein & MacMillan's contributions in this field, in particular to the heritage and history of the firm. This was prompted by the display of a small newspaper cutting in which Coia talked of the "collective personality"[75] of the office (referring to the atelier ethos, where student and professional alike were permitted to contribute freely to

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[72] Glendinning, M., MacInnes, R. and MacKechnie, A. (1996) A history of Scottish architecture from the Renaissance to the present day. Edinburgh: Edinburgh University Press, p. 440.

[73] Gillespie, Kidd & Coia: Architecture 1956-87 (2007-08), At: The Lighthouse: Scotland's Centre for Architecture, Design and the City. 3 November 2007 – 10 February 2008.

[74] Barley, N. (2007) 'Foreword on the Gillespie, Kidd & Coia project.' *In* Rodger. J.(ed.) Gillespie, Kidd & Coia: architecture 1956-1987., Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City, p.3.

[75] Gillespie, Kidd & Coia: Architecture 1956-87 (2007-08), At: The Lighthouse: Scotland's Centre for Architecture, Design and the City. 3 November 2007 – 10 February 2008.

the architectural discourse surrounding office projects). This highlighted the value of a range of individuals as part of the practice structure.

The exhibition began chronologically, in 1956, with St. Paul's, Glenrothes praised as a seminal modern building in the context of Scotland, said to break the ecclesiastical mould of the firm. Johnny Rodger highlights in his contribution to the book that accompanies the exhibition, that until that moment, the practice had produced churches that had been viewed as very much "of their time",[76] an opinion that could be interpreted to be a negative commentary on the churches that preceded those celebrated in the exhibition. This view is relevant to this study as it raises the question of how critics produce value through their commentary. Appearing to render the practice's earlier schemes in a somewhat ambiguous light, the comment was an interpretation of an interview between Isi Metzstein and Gavin Stamp and was Metzstein's response to a question on the firm's design work of the interwar period.[77]

Fig. 1 Image of St. Paul's, Glenrothes, exhibited at the Lighthouse, 2007

[76] Rodger, J. (2007) 'Towards the MacMillan and Metzstein Years.' In Rodger. J.(ed.) Gillespie, Kidd & Coia: architecture 1956-1987., Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City. p.15.

[77] Rodger, J. (2007) 'Towards the MacMillan and Metzstein Years.' In Rodger. J.(ed.) Gillespie, Kidd & Coia: architecture 1956-1987., Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City. p.15, p. 25.

The starting point of the exhibition, St. Paul's, Glenrothes, inevitably addresses the notion of design attribution, by the omission of prior schemes. This was meaningful in establishing the terms of this study, which correspondingly aims to avoid undue emphasis on key individuals. Its negation of the significance of immediate design context from the firm itself similarly suggested that earlier work was conspicuous by its absence.

The ambition of this thesis is not to denigrate any aspect of the practice's work, but rather to try to appraise it objectively. If one talks of 'stylistic' differences, it is true that St. Paul's appears to be substantially different to the practice's previous church designs. However, it seems unsatisfactory to talk of its modernism – and indeed the modernism of Gillespie, Kidd & Coia's entire oeuvre - simply in terms of severing stylistic ties with the past, which Proctor acknowledges as being due to artistic or aesthetic choices that may not be present in secular modernist practice.[78] The design approach of St. Paul's and later churches and seminaries may be distinctive and even pioneering in terms of architectural "style", however, the exhibition and book raise a key question – what exactly is the relationship between modernism as an architectural movement or philosophy, and progressive liturgical thinking? To what extent did they deal with the 'social and theological rather than formal or stylistic'? These were concerns with which Peter Hammond was heavily preoccupied in his critique of new churches built in the wake of the Liturgical Movement in the mid-twentieth century[79]. Churches such as St. Paul's were, as Miles Glendinning suggests, building types fundamentally still connected to the Council of Trent.[80] It is difficult to determine, perhaps even with interviewing the architects personally, the extent to which their churches were based on genuine liturgical and social functions, although Hammond appears to make some concession to the 'Glenrothes' church in its potential for addition to liturgical debates in continental Europe at the time of writing Liturgy and architecture[81].

It has sometimes been suggested that Metzstein and MacMillan's particular interest in the interior space of a building, as opposed to that of Jack Coia himself, who, according to Charles McKean, was seemingly more preoccupied with the external, three dimensional

[78] Proctor, R. (2014). Building the modern church: Roman Catholic church architecture in Britain, 1955 to 1975. Farnham: Ashgate Publishing Limited., p. 51.

[79] Hammond, P. (1962) 'Foreword.' *In Towards a church architecture.* London: The Architectural Press, p. 15.

[80] Glendinning, M. (2009) 'Remaking the future: the multiple faces of post-war Scottish architecture.' *In* Cooper, M. and Mays, D. (eds.) Scotland: building for the future. Historic Scotland. pp. 49-59.

[81] Hammond, P. (1960) *Liturgy and architecture.* London: Barrie and Rockliff, p. xv.

qualities of a building (particularly a church), and its particular context.[82] Indeed, Metzstein and MacMillan themselves refer, in the films in which they are interviewed, to the fact that they 'designed from the inside out'[83] and of their having been seriously influenced by the Renaissance interest in internal spaces, in addition to a particularly Gothic interest in structure. In contrast to McKean's view, this is a concept which could very easily also be applied to some of the earliest churches designed by Jack Coia and his first assistants. Metzstein and MacMillan's preoccupation with the interior is elucidated by their deep plans, promenades and 'changing spatial experiences which are extended beyond the entrance and into the interiors.[84] Concern with linear spatial experience would have been a concern of both Coia and the younger men; however, the earlier churches were designed at a time when the axial ritual of the traditional mass was still influential to ecclesiastical plan form, whereas some of those undertaken in the 1950s began to connect to quite different architectural precedent.

Their "form follows function" approach is highlighted in Metzstein's view that the Swiss Re building in London is a form that is 'predicated and filled with floors'.[85] This raises the question of whether they viewed the firm's previous ecclesiastical work as predetermined building envelopes filled with the traditional vision of a liturgical programme, and whether they consciously broke with the conditioned view of a church, despite – or even because – they themselves were declared atheists. In the early work, the interior is, to an extent, conditioned by the climate of ecclesiastical traditionalism that prevailed in Scotland at the time. Metzstein and MacMillan's approach was more consciously abstract; the 'first principles' of which they speak are more likely to have
found fuel in the evolving modernist theories with which they would have been conversant as young architects in the late 1940s and 1950s.

The focus of the exhibition – the post-1956 work - therefore, need not have precluded a more detailed demonstration of the context from which it came and to which it is perceptibly connected, and would certainly have offered a foil against which the later designs could be placed.

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82 In conversation with Professor Charles McKean, January 2007.

83 *Lessons in architecture* (2007) Directed by Saul Metzstein [DVD] Glasgow: The Lighthouse.

84 Ibid.

85 Ibid.

While the patronage context within which the firm operated was one of a confident Church that embarked on an ambitious building programme. In addition to a growing Roman Catholic migrant community within the Archdiocese of Glasgow, Williamson suggests the social context from which this emanated. The housing crisis in the wake of the First World War had prompted political action in the form of the government's 1924 Housing Act, pushed through by the Glaswegian Health Minister, John Wheatley. Following the Second World War and the Clyde Valley Plan (1946), further areas of new housing were built, including new towns such as East Kilbride and Cumbernauld. New churches quickly followed. Williamson also writes of the theological background against which new churches were built; of the post-First World War political and socially-driven ambitions of the CUAG[86], and of its adoption of papal initiatives such as Catholic Action, which had supported the

Participation of lay people in the apostolate for the defense of religious and moral principles, for the development of a healthy and beneficial social action under the leadership of Church hierarchy outside of and above political parties for the purpose of restoring Catholic principles to family life and to society.[87]

The need for new churches in the first place was linked to social provision and theological guidance in the face of threats such as communism, referred to earlier.

The specific relationship that practices such as Gillespie, Kidd & Coia developed with their ecclesiastical patron is discussed in Proctor and Watters.

In *Building the Modern Church*, a background is set for the relationship of church architect and client. It was common for parish priests to choose their own architect, but in the case of Gillespie, Kidd & Coia, whose offices, by the mid-1950s, had moved next door to the archdiocesan office in Glasgow in Park Circus, there is a suggestion that Coia had ingratiated himself with the Roman Catholic Church at institutional level, and especially to the Archbishop himself. Thus, the practice was known within the archdiocese as a whole, and recommendations could be made to individual parish priests[88].

[86] Catholic Union of the Archdiocese of Glasgow
[87] Aradi, Z. (1958) *Pius XI the Pope and the man*. New York: Zsolt Aradi, p.189.

[88] Proctor, R. (2014). Building the modern church: Roman Catholic church architecture in Britain, 1955 to 1975. Farnham: Ashgate Publishing Limited, p.53.

Both Proctor and Watters offer an insight into the architect preferences of the Glasgow Archdiocese. Watters asserts that during the 1950s its preferred architect was Thomas Cordiner, with Gillespie, Kidd & Coia making a resurgence in popularity with the client by the early 1960s - a sign perhaps of a growing interest in the formally original designs such as St. Paul's at Glenrothes, built for the Archdiocese of St. Andrew's & Edinburgh. In respect of this, Proctor argues that when Gillespie, Kidd & Coia were often chosen for commissions with a more overtly 'modern' feel it was largely due to the particular preference of the parish priest. Thomas Cordiner, for example, was often chosen to undertake more overtly traditional commissions.

The relationship between modernism in ecclesiastical commissions and the set-up of architectural practice is also analysed in Proctor's work, and specific examples of practices engaging in work for the Roman Catholic Church are discussed. One such example, unsurprisingly, is that of Gillespie, Kidd & Coia, the organisation of which, according to the author, was not uncommon in firms undertaking church commissions following the Second World War. This relates mainly to the practice of allowing the younger members of the team some relative freedom in terms of church design, which was sometimes seen as secondary to the large schemes necessitated by the welfare state. That a modern ecclesiastical expression gained momentum and acceptance during this period, is not at odds with the fact that these younger architects had undergone more recent training than their practice forbears. However, Proctor makes the point that Coia himself could not have played any part in a perceived change of design direction within the firm,[89] but one of the central aims of this thesis is the suggestion that this represented instead part of an unfolding of design rather than an acute shift in philosophy.

The publication produced for the 400th anniversary of the Scots Pontifical College in Rome, *The Scots College Rome 1600-2000*, edited by Dr. Raymond McCluskey, particularly offers an insight into probably the most significant character in any connection between Coia's first churches and the Holy See. [90]

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[89] Proctor, R. (2014). Building the modern church: Roman Catholic church architecture in Britain, 1955 to 1975. Farnham: Ashgate Publishing Limited, p.49.

[90] In 2000, Raymond McCluskey was a teacher of history at St. Aloysius College, Glasgow

Architecture

We can think of architecture in this case both in terms of the specific ecclesiastical designs of Gillespie, Kidd & Coia, and as a methodological approach to their analysis. In design terms, a number of authors provide access to the firm's specific building background. In 1986, Robert Rogerson (1917-2007), a former student of Coia, published the first book about the firm, the idea having first been discussed with Coia in 1978[91]. The book gave an overview of the firm, which had not existed in publication previously. Then, in 1994, a series of essays with the 'creative output' of the firm as their subject, were brought together in the Mac Journal, a publication for the discussion of architecture and urban design in Scotland. [92] The first edition was dedicated to Metzstein and MacMillan, and coincided with MacMillan's retirement as Professor of the Mackintosh School of Architecture.

The two publications highlight quite different approaches to similar themes. For example, Rogerson's discussion of the firm's churches is generally factual and talks of the buildings in terms of their size, contents, and architectural features, whereas writers such as Ballantyne, who taught at the Mackintosh School of Architecture, describes the firm's buildings through a more romantic narrative.

The late Robert Rogerson's record of the life and work of Jack Coia[93] can be viewed as an unpolemical record of the firm's work, with an emphasis on its establishment in the interwar years, and hence an emphasis on Coia himself. This emphasis is furthered by his knowledge of Coia from the perspective as one of his architectural students in the 1930s. Unlike the 2007 exhibition or the accounts of the firm's work in *Mac Journal*, Rogerson's work to some extent contributes a less partial view of the practice due to his never having been employed by it. His is the only published work to consider a multifaceted view of Coia himself and his work, the general accuracy of which was corroborated by Jacqueline Coia.[94]

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[91] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, inside cover.

[92] Macaulay, J. and Hermansen, C. (1994) 'Editorial' *MacJournal*, (1).

[93] Rogerson, R. (1986). Jack Coia: his life and work. Glasgow: Robert W.K.C. Rogerson.

[94] In response to a letter to Jacqueline Coia from the author, dated 29th September 2006: Coia, J. (2006) Letter Re-Jack Coia from Jacqueline Coia to the author (no date given on letter).

In the preface, Patrick Nuttgens briefly notes the increasing magnitude of Coia's reputation, asserting his importance 'in the international scene of 20th century architecture'.[95] This is one of only a small number of comments from observers of Coia's work that are suggestive of the international importance of early ecclesiastical design work, the other significant assertion coming from Peter Anson [1889-1975] when commenting on the seminality and potential of the Roman Catholic Pavilion[96]. However, Anson himself had been criticised by Hammond in 1960, as he was perceived to be, in the main, more interested in the superficial side of modern religious architectural design.[97] The international aspect of the firm, prior to the post-war work, which is acknowledged to have been in the 'international design press' in Mac Journal One,[98] adds weight to the internationalism of the practice as a whole.

Rogerson's relationship with Coia began in the mid-1930s when he was Coia's student at the Glasgow School of Architecture. Since that time, he 'admired his work and followed his career with interest'.[99] His biographical account of Coia is very broad, beginning before the older architect was even born, with his parents' emigration to the UK in the late nineteenth century, and ending with his funeral homily in 1981.

The intervening years are just as enthusiastically recorded, shedding light on Coia's early education and work in the family café in Parkhead, Glasgow, and subsequent apprenticeship to John Gaff Gillespie in 1915. Several important factors can be discerned from this early period; not least, that Gillespie's firm was working on the prestigious Stirling project when Coia joined. He spent the first five years of his apprenticeship tracing drawings; the experience of the first returning to Coia in 1938 with the building's completion – according to Gillespie's original design - proposed but then abandoned due to imminent war; and the second, the formative process of Coia's craft.

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[95] Rogerson, R. (1986). Jack Coia: his life and work. Glasgow: Robert W.K.C. Rogerson, p. vii.

[96] Watters, D. (1997). Cardross Seminary: Gillespie, Kidd & Coia and the architecture of postwar Catholicism. Edinburgh: RCAHMS, p. 23.

[97] Hammond, P. (1962) *Towards a church architecture.* London: The Architectural Press, p. 16.

[98] Macaulay, J. and Hermansen, C. (1994) 'Editorial' *MacJournal*, (1).

[99] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p. 1.

Rogerson, complimentary about Coia and the firm's achievements, presents their work in a chronological, catalogue-like fashion, with descriptions of not only churches, but also the other building types in their portfolio. Whilst of value to the known record of Gillespie, Kidd & Coia, and frequently referenced in subsequent literature documenting the life and output of the firm.[100] Rogerson's descriptions – particularly of the churches – though useful, in their briefness avoid lengthy consideration of an extended context.

However, Rogerson does suggest aspects of Coia's early career that may have been influential to the initial years of practice, for example, his study trip to Italy in 1923, and a debt to his formative years with John Gaff Gillespie. Rogerson articulates that from this earliest of experiences into the architectural milieu into which he would flourish, he carried forward something of the older firm's attention to ornamentation, craftsmanship, and particularly structure[101].

Rogerson's work contributes a wide range of themes that address the various aspects of the firm's work. These include not only factual information on his education, apprenticeships and practice chronology, but also on the personalities with whom he was involved during his working life, and his own personal experiences of Coia as a tutor. Appendices add more weight to the framework of contextual information surrounding his life, including the Archbishops installed during the various phases of Coia's career, and a chronology of work executed, by building type, and a record of awards presented to Coia, listed in the same manner.

In a discussion that focuses on a wide degree of input rather than exclusively from selected individuals, Rogerson, along with Ballantyne and Proctor, discuss the artistic aspect of church commissions. All three writers refer specifically to artists and craftspeople involved in Gillespie, Kidd & Coia's schemes, but offer a variety of views. Rogerson describes and ascribes the various architectural features such as glazing, and liturgical fixtures such as Stations of the Cross and crucifixes, to a recurring list of names, many of whom were known to Coia from the Glasgow School of Art.

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[100] Rogerson's work is referenced in Watters (2016), pp. 42 & 48, and Rodger (ed.), p. 12.

[101] Rogerson links Salmon (junior) and Gillespie's originally designed Lion Chambers office building (1904-7) to the complex structural fourth floor extension to the Ca d'Oro building (1928). See Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p.16

Ballantyne also mentions some of these names, but in his article, 'Artists and materials', he also describes the work of the architects themselves (Gillespie, Kidd & Coia) in overtly artistic terms, in an original take on the firm. [102]

Proctor investigates the synergistic relationship between a church's architecture and its artwork, showing that the emergence of a widely accepted form of ecclesiastical art – particularly Roman Catholic art – had developed through an understanding of the spiritual power of 'good' modern art commissioned from individual artists, as opposed to the saccharine mediocrity and spiritual poverty of mass-produced religious art. The use of non-Catholic artists commissioned during the post-war period for two-dimensional or sculptural work is also a subject discussed, with the particular examples of the Jewish artists, Jacob Epstein and Benno Schotz. Epstein's exceptionally well-received sculpture of the Madonna and Child at the Convent of the Holy Child Jesus, on Cavendish Square, London (1951-53) provided a confident precedent for Schotz's sculptural work for Gillespie, Kidd & Coia later that same decade. However, although this may have been celebrated, it was not the first incidence of Schotz having collaborated with the firm, such partnership having occurred already with two high-relief stone vignettes at the entrance to St. Matthew's, Bishopbriggs in 1950, and even earlier, the sanctuary cross at St. Columba's, Glasgow, in c. 1939.

Schotz himself provides an insight into his collaboration with the practice, describing in his 'memoirs', *Bronze in my blood* (1981), his sculptural work on a number of Gillespie, Kidd & Coia's churches. The interesting point is not only his relationship with the firm, but also how both he and his modern sculpture was perceived by the Archdiocese of Glasgow. [103]

Investigation of a number of texts with regard to the patronage context of Gillespie, Kidd & Coia's churches highlights a large amount of literature concerning the second half of the twentieth century, with a smaller degree of information dealing with the first half. The reason for this is the culmination of decades of liturgical debate, and in the Roman Catholic Church, the far-reaching effects of the Second Vatican Council. Although Gillespie, Kidd & Coia did not work exclusively for the Roman Catholic Church, the vast majority of their ecclesiastical commissions stemmed from its relationship with this institution, and so its importance as patron is considerable. A number of titles address liturgical matters in the twentieth century, and some, such as Peter Hammond's *Liturgy*

[102] Ballantyne, I. (1994) 'Artists and materials.' *MacJournal*, (1), pp. 33-39.

[103] Schotz, B. (1981) *Bronze in my blood*, the memoirs of Benno Schotz. Edinburgh: Gordon Wright Publishing.

and architecture,[104] *Towards a church architecture*[105] and G.E. Kidder Smith's *The new churches of Europe,*[106] discuss the fortunes and failures of church design at the critical juncture of the early 1960s. This was at a time when the observations of the New Churches Research Group were a contemporary concern, on the eve of and during the Second Vatican Council, and when Rudolf Schwarz (1897-1961), who was an influential figure in the promotion of new liturgical forms, and had recently died.

An examination of new ecclesiastical architecture within continental Europe becomes a key concern, along with an architectural parallel in the British Isles. Hammond's British focus is mainly on England, for either denominational or circumstantial reasons. In his role as director of the New Churches Research Group, was actively critical of the superficial way in which he perceived the conception and design of contemporary British churches. Hammond's obituary refers to a series of conferences, pamphlets and study tours,[107] which ensured that a wide audience was party to these views.

Contextually, the liturgical changes formalised in the Roman Catholic Church were just part of a wider, interdenominational movement of criticism of the functionality of The Church, as argued by Rev. Peter Hammond. His assessment and critique of the 'depressing'[108] state of post-war church architecture within the Church of England, caused by its own failure to grasp and rejuvenate its core purpose, contributes to the reader's comprehension of contemporary English church architecture through comparison with European examples.

The single most important contribution that Hammond makes to our understanding of twentieth century church architecture is knowledge of the two main camps into which churches recently built at the time of writing fall. These consist of those churches for which aesthetics and composition play a dominant role, and those, forming the principal premise of the book – which eschew aesthetics in a conventional sense, in favour of a strong

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[104] Hammond, P. (1960) *Liturgy and architecture*. London: Barrie and Rockliff.

[105] Hammond P. (ed.) (1960) *Towards a church architecture.* London: The Architectural Press.

[106] Kidder Smith, G.E. (1964). The new churches of Europe. London: Architectural Press.

[107] Murray, K., and de Waal, E. (1999) 'Obituary: Canon Peter Hammond.' *Independent.* [Online] 24th March [Accessed 2nd July 2017]
http://www.independent.co.uk/arts-entertainment/obituary-canon-peter-hammond-1082634.html

[108] Hammond, P. (1960) *Liturgy and architecture*. London: Barrie and Rockliff., p. 1.

underpinning of liturgically minded planning. His work is important as it encourages a mutually beneficial relationship between architecture and the liturgy, suggesting that 'liturgical reform can well begin with the church building itself'.[109] In contrast to the loosely worded advice on church building in the *Sacrosanctum Concilium*, Hammond's view is rather clearer.

Methodologically, writing fairly and justifying criticisms, Hammond analyses a number of English churches of differing denominations, through text and plan drawings. The analysis predominantly focuses on spatial planning, successful examples of which are portrayed as being very closely related to renewed understanding of fundamental liturgical values. He puts forward the view that it is more appropriate to return to the spirit of 4th century Early Christian churches as opposed to 14th century Gothic, but to progress with contemporary understanding of the liturgy and contemporary material and constructional knowledge. An array of European examples are included in the analysis, along with some of the small number of good English examples. Despite its thoroughness, the book would benefit from a degree of visual comparison, outlining precisely why – graphically - the examples discussed were superior to the majority of contemporary English churches.

The conviction, with which Hammond writes regarding the need to return to a study of the function of the liturgy in modern church design, is clear. However as Nigel Melhuish contemplates in Hammond's next book, Towards a church architecture, the very idea of functionalism at the time of writing was being thrown into question, 'that in using the language of function the liturgical movement is reverting to a way of thinking which architects have already abandoned.'[110]

St. Peter's Seminary at Cardross is an example of an ecclesiastical scheme on a large scale, which did not survive the crisis of liturgical design. Liturgically it was based on a traditional, rigid and closed monastic community, and architecturally, an individualistic, artistic approach to late modernism rather than the rational, functionalist type.

Methodologically, Kidder Smith's illustrated country-by-country case studies are generally factual in approach, with some supporting experiential observations. The descriptions extend to the buildings' construction and materials, and this is useful technical knowledge

[109] Hammond, P. (1960) *Liturgy and architecture.* London: Barrie and Rockliff., p. 25.

[110] Melhuish, N. (1962) Modern architectural theory and the liturgy' In Towards a church architecture. London: The Architectural Press. P.41.

when studied in conjunction with the building drawings. This empirical approach provides a useful background to the context of this thesis, where a number of churches will be described and analysed. In addition to the inventory of churches that form the main body of Kidder-Smith's publication, a fold-out page of comparatively drawn floor plans does highlight the variety of designs studied, and underlines the author's conclusion that 'no developed pattern can be seen' in the illustrations. [111] This visual ordering of drawn information does provide an overview, but a mediating level of analysis between observational description and comparative drawings would encourage greater understanding of the concrete differences between the selected case studies. This study will explore ways of integrating observation, analysis and presentation in order to investigate both differences and similarities in the work of a single architectural practice.

Parallels

This discussion examines the idea of parallel developments to those of Gillespie, Kidd & Coia, both in a UK context, and through international case studies. Within a UK framework, architectural writers such as Proctor have widely discussed twentieth century church development. His 2014 publication, *Building the Modern Church: Roman Catholic Church Architecture in Britain, 1955 to 1975* updates a subject that, as he himself acknowledges, had received relatively little attention since Bryan Little's book, *Catholic Churches Since 1623*, and a relatively small number of other publications, which, tended to be more 'descriptive than interpretive' in their typological cataloguing of architectural features.[112] However, he does note publications that contribute to the social history of the Church, including Michael Hornsby-Smith's *Catholics in England*, in addition to a PhD thesis by Paul Walker, dealing with *Developments in Catholic Churchbuilding in the British Isles, 1945-1980*. Since then, the addition of Clifford Williamson's 2016 book, *The History of Catholic Intellectual Life in Scotland, 1918-1965*, goes some way to complementing Proctor's bibliographic review, with the social and theological history of the Church in a specifically Scottish context.

[111] Kidder Smith, G. (1964) *The new churches of Europe.* London: The Architectural Press, p. 11.

[112] Proctor, R. (2014). *Building the modern church.* Farnham: Ashgate Publishing Limited, p.10.

Proctor's book presents as its core aim, the relationship between the church as a building, and the Church as an institution, focusing on the Roman Catholic Church architecture to emerge in Britain during the post-war period, a time of great change in overlapping spheres – socially and liturgically, as well as architecturally. Within the framework of this proposal, this clear distinction between building and church translates to the relationship between architect and client, or architecture and liturgy, and strengthens his earlier observation that a good deal of prior study neglected to interpret architectural observation with knowledge of Church history.

Critically, his work raises the theme of context or parallel, by assessing modern church architecture within the context of Great Britain, where relevant discussing Scotland and specifically Gillespie, Kidd & Coia. This is an important distinction to the work of Glendinning, Rogerson, and Watters, who all write from a primarily Scottish perspective. A comparison of the two viewpoints is both interesting and necessary in interpreting the work of Gillespie, Kidd & Coia.

Even though this theme has now been well covered, Proctor's work discusses an essential backdrop to a developing modernism in Scotland. Within a wider, international context, we can look to the Vatican itself as the source of a papal initiative, and in the Greater Rome area for the results of the church–building drive that it instructed.

Proctor discusses a number of other themes that are significant to this study. One of the most relevant amongst these are notions of tradition and modernity, to a large extent one of the main reasons why Gillespie, Kidd & Coia have so often been discussed in such schismatic terms. This had been addressed before in ecclesiastical terms by Diane Watters, but her discussion related to a specifically Scottish design attitude and as something of a lead-up to the period of Gillespie, Kidd & Coia's practice. Proctor's discussion is situated within the wider sphere of Great Britain, and deals with the stance of Roman Catholics on this in problematic opposition to the secular view and use of modern architecture in society. In his work, the Catholic Church is historically presented as taking something of a middle ground in the exigencies of this debate, with its sanctioning of a measured employment of modernity in its church buildings within an existing framework of Roman Catholic tradition. He discusses an interesting notion of stylistic association in relation to the design of Roman Catholic churches compared to Protestant churches from the latter part of the nineteenth century. This is the suggestion that Early Christian, Byzantine and Romanesque features were used in the design of Roman Catholic Churches because they were associated with Europe, an early and therefore more 'legitimate' mode of ecclesiastical design, and a recognised Catholic tradition.

Architecturally speaking, perhaps because of its ability to be pared back aesthetically, it was also considered to lend itself to a type of compromise between tradition and an advancing modernity. These ideas set a frame of reference for a discussion beginning with Gillespie, Kidd & Coia's earliest ecclesiastical work.

He links the demographic reasons tied to an expansion in Catholic church building in Britain to notions of 'relevance' that modernism could bring to the church, even if closely linked to the secular national modernisation of the country following the Second World War.

While Proctor discusses the Church's gradual acceptance of a modern aesthetic in terms of building materials and construction, within Scotland, Watters presents a background of post-war modern thinking and building, starting with housing and new concepts of community. This was the era of new town building, and the construction of a number of these, would prefigure a number of Gillespie, Kidd & Coia's post-war designs. Her recording of Scotland's stance on the durability of strict modernism and its subsequent adoption of a more idiosyncratic form of modernism, as seen in schemes such as St. Paul's, Glenrothes, St. Bride's, East Kilbride, and Sacred Heart, Cumbernauld.

In terms of stylistic influence or inspiration for Gillespie, Kidd & Coia's churches, we are frequently told of Jack Coia's personal eclecticism,[113] of the Early Christian, Byzantine or Romanesque feel of the early churches, and of acknowledgment of the Northern European brick functionalism of Dudok[114] or Behrens, or further afield to the USA and Frank Lloyd Wright. In the post-war period, Le Corbusier and Aalto were recorded as having been influential on the firm. Yet we rarely, if ever, see their designs compared, as an entire body of work, to similar church building drives elsewhere. While not all commissions were exclusively for the Roman Catholic Church, the vast majority were undertaken for that institution. Such a parallel programme of church building was carried out, and was a direct response to a papal directive, Pius XI's *Pontificia Opera per la Preservazione della Fede e la Provvista di Nuove Chiese*,[115] which in 1930 began a long

[113] Baxter, N. (1994) 'Early Coia buildings' *MacJournal*, (1), p. 15.

[114] Modern architects such as Dudok were referenced by students in other Schools of Architecture. Crinson and Lubbock give the example of Leicester School of Architecture. See Crinson, M. and Lubbock, J. (1994) *Architecture, art or profession? Three hundred years of architectural education in Britain*. Manchester: Manchester University Press., p. 106.

[115] Translates as 'Pontifical Work for the Preservation of the Faith and the Provision of New Churches in Rome'. The title was subsequently shortened to *Opera Romana*.

programme of church building within extant and new parishes in Rome and within its developing suburbs beyond the city walls. Two main areas of interest emerge from this, the character of Pius XI (1922-39) himself and his interest in building, and the new ecclesiastical buildings themselves. The first topic is dealt with by one of the very few biographical works on that Pope, Zsolt Aradi's *Pius XI the Pope and the Man*, written in 1958. The book is an account of the quite extraordinary life of Achille Ratti (1857-1939) and includes a section on his actions and activities following the Lateran Treaty in 1929. Of these, the most provocative and useful aspect to this study is his interest in modernising though building and other means of technology. Apart from his modernisation of much of the Vatican, this also became evident in the extensive programme of church building that he instituted under the *Opera Romana*. While the early decades of this initiative were to some degree later criticised in design terms by church designer Ignazio Breccia Fratadocchi, writing in Stefano Mavilio's edited book, *Guida all'Architettura Sacra Roma 1945-2005*,[116] they were the start of an intriguing body of work which were similarly 'transitional' in nature to those of Gillespie, Kidd & Coia. The Scottish firm's first church began within a year of the papal initiative.

Ecclesiastical buildings of two periods of the *Opera Romana* are covered as major architectural works. The Vatican itself published *Pio XII Vescovo di Roma*[117] in 1956, which charted new ecclesiastical works carried out under Pius XI's successor, Pius XII (1939-58), and written while the Pope was still alive. *Guida all'Architettura Sacra Roma 1945-2005* starts with an assessment of new churches beginning after the end of the Second World War, and ends with the building of a church to mark the Jubilee in 2000. These publications are a useful reference to a large number of these new Roman churches and contribute to empirical knowledge gained by the author of this study.

[116] Translates as *Guide to Roman Sacred Architecture 1945-2005*
[117] Translates as *Pius XII Bishop of Rome*

Methodology

The process of writing this thesis is the result of a study of Gillespie, Kidd & Coia that initially began as the subject of an MA course. It quickly became clear that this was a far greater task than initially anticipated, and that a PhD would allow a more comprehensive investigation to be carried out. The principal themes for the framing of the work - Practice, Architecture and Parallels - introduced in the Introduction, form both the chapter titles and serve to organise information in preceding sections, namely the Literature Review and Methodology.

Gillespie, Kidd & Coia undertook a large number of religious commissions within the lifespan of the firm. These included both newly built parish churches, a university chaplaincy, private oratories, a seminary, and renovations and re-ordering of existing buildings. The detailed focus of this study, while acknowledging the vast breadth of their work, will centre typologically on parish churches, a chaplaincy, and an oratory. The parish churches and chaplaincy were public, and the oratory a privately occupied institution, which reflect the firm's design development over its lifespan, the parish church being the first building type to be commissioned of the re-named practice. Taken as a whole, these are more indicative of the varied nature of the practice's stylistic sources, have involved different practice personnel, and they relate more directly to the community-based concerns of the Liturgical Movement. On the other hand, significant work such as St. Peter's Seminary, already widely discussed by Watters and others, was built for an isolated community and though typologically different, more openly acknowledged influences such as Le Corbusier's La Tourette.

In practical terms, the approach adopted for this study has encompassed two main methods of collecting data, literature and document-based research from a range of sources. Books, parish leaflets and websites, drawings, correspondence and other records from archives and libraries in both the UK and Italy were consulted, and field work, where data concerning specific buildings has been sought and collected first-hand from the buildings themselves. Additionally, though not part of any formal critique of the firm or its work, a number of people were consulted in discussion of the practice or of its members.

The methodology has been characterised by return visits to archives and churches in a phased pattern of study; successive visits made to either garner new information or to augment or question existing information.

Practice

The thesis began as an MPhil mode of study, eventually converting to a PhD, which was one if its original aims. Having undertaken a number of field visits to churches in the Glasgow area prior to beginning the PhD, after transfer focus shifted from the studying of churches in isolation to investigation of the context of the firm.

As this thesis seeks to emphasise the singularity of the practice, it was felt that in discussing it, its existence as a whole should be investigated, that is to say from its beginning in 1927 until the last church was designed in 1979. This involved literary and exhibition analysis[118], archival research at a number of locations including the archives of the Glasgow School of Art, the Archives and Special Collections at the Mitchell Library in Glasgow, the archives of the Archdiocese of Glasgow, and the Scottish Catholic Archives in Edinburgh.

Practice context, as discussed in the Introduction and Literature Review, involves both the history of the practice and, as their principal patron, that of the Church. The work of a number of key authors were initially consulted, foremost amongst them were Rogerson and Watters, who provided a working knowledge of Gillespie, Kidd & Coia in chronological terms, and a notion of the significance of this firm - seemingly a local architectural practice whose ideas and output were anything but parochial. Chronologically, Coia's return to Glasgow and installation as a partner in the firm where he had trained marked a logical point at which to begin the study. Gillespie and Kidd - the former named partners - were by that point both deceased, and with the exception of a small number of continuing jobs, the practice - renamed to reflect its change in circumstance - embarked in a substantially new direction with Jack Coia in charge. The Archives of the Glasgow School of Art then revealed more detailed biographical data concerning Coia himself and specifically his formative years as a student at the Glasgow School of Architecture. Copies of the Alphabetical Register provide factual detail to the academic framework encountered by students of architecture at the time of Coia's scholarship there, from 1917-1923. These offered an insight into the structure of the learning experience, to the opportunities made

[118] Gillespie, Kidd & Coia: Architecture 1956-87 (2007-08), At: The Lighthouse: Scotland's Centre for Architecture, Design and the City. 3 November 2007 – 10 February 2008.

possible to the talented, and to the people with whom Coia would have been familiar, and who to some degree may have influenced him in his later practice.

The significance of the practice as a single institution was tested in 2007, when an exhibition, *Gillespie, Kidd & Coia: Architecture 1956-1987* provided an opportunity to review work - drawings and some correspondence - belonging to the Gillespie, Kidd & Coia practice archive, then in the process of being catalogued. Visiting the exhibition as part of an investigation of practice background was helpful in understanding particular modes of practice perception at that time, where the editorial framing of the work provided evidence of a selective approach to its history and institutional context.

Having discovered documentary data as described, the task then focused on trying to establish whether there was any formal evidence of the firm's relationship with the Church. In consultation with the archives of the Archdiocese of Glasgow, this proved to be a difficult undertaking owing to an absence in recorded meeting minutes from the same Archdiocese from 1930-1975, virtually the entire period of Gillespie, Kidd & Coia's existence. Correspondence from the Glasgow School of Art Archives, however, did shed some light on the type of communication that the practice maintained at both Archdiocese and parish level, and literature concerning church politics in Glasgow also became a useful source of reference in understanding the greater context of religion in twentieth century Scotland.

Architecture

During the MA study, the author began to collect photographic and descriptive information from the Royal Commission on the Ancient and Historical Monuments of Scotland, providing outline information on a number of churches. The largely descriptive information offered a basic understanding of certain buildings, but the limited details provided were divorced from both historical context and first-hand experience. Building visits were therefore considered important in relating documentary information to the buildings themselves.

Although the early field visits mentioned previously were undertaken outside the more formal structure of a PhD, they were key to beginning to accumulate a greater body of more complete information and first-hand impressions of the firm's work. At this time, however, visits were largely carried out ad hoc, according to information found through documentary study.

During the course of the MPhil, existing drawings of churches were sought, and the Mitchell Library archive and Glasgow School of Art archive provided some of these. Particularly useful were Dean of Guild drawings such as those of St. Anne's, Dennistoun and St. Charles's, Kelvinside, where a varied set of drawings gave a more complete picture of the construction phase of the schemes. Obtaining a substantially complete set of building drawings, however, proved to be a far more onerous task than anticipated.

Following PhD transfer, further church visits were undertaken, including to some not experienced previously. Consultation with parish priests in some cases produced, in addition to anecdotal information, documentary leads including architectural drawings of St. Columbkille's, Rutherglen and St. Matthew's, Bishopbriggs. Peripherally interesting drawings such as those of the presbytery of St. Peter-in-Chains were also found in this way.

A process of structuring different strands of work was then begun, to try to formalise the author's understanding of the topic by that point. A number of papers were delivered, some of which focused on specific buildings, such as that prepared for the AAH Summer Student Symposium at the Henry Moore Institute, Leeds, Architectural Objects: Discussing Spatial Form Across Art Histories. The paper, *The Prototype Pavilion – Modernism, National Identity & Religion in the Context of Scotland*, discussed architectural expositions of the twentieth century, and how they often gave designers the opportunity to create experimental forms of architecture on a relatively small scale. The central theme was the Glasgow Empire Exhibition of 1938, whose pavilions, designed by a team of Scottish architects, highlighted a new national confidence following decades of economic and social depression. Gillespie, Kidd & Coia's Roman Catholic Pavilion was one of the most striking, unconventional and overtly 'modern' pavilions created at the exhibition, particularly in a religious context. The paper argued that 'Empirex' allowed Gillespie, Kidd & Coia to experiment, as early as 1938, with the prototype for a Scottish national version of ecclesiastical modernism.

More recently, following a review of work produced in terms of a drawn record of churches, further fieldwork was undertaken. Although initially it had taken some time to effect a visually comparative presentation of the churches, what had become apparent was that while a predominantly chronological approach had allowed for a visual record of previously disparate drawings to be created, they were not overtly analytical. They were therefore of limited use to a meaningful study of the architectural value of each building as part of an unfolding oeuvre. Furthermore, it had excluded any ecclesiastical commission that was not strictly a parish church with the exception of the Roman Catholic Pavilion. It

had also excluded the single example of new-build work that was not designed for the Roman Catholic Church, so there was a level of inconsistency in the first study. Therefore further analytical studies were prepared based on field visits, most particularly to non-parish churches such as the Archbishop's Oratory at 19 Park Circus, and the Catholic Chaplaincy at Turnbull Hall, University of Glasgow, and to the Lutheran church of St. Columba, East Kilbride. Additionally, measured surveys were undertaken, including the use of 3D laser scanning technology to record spaces volumetrically.

Using the format of a workshop, undertaken with MArch students early in 2016, a revised angle of study incorporated a data-gathering and measured survey exercise of a cross-section of ecclesiastical work representative of the entire period of the existence of Gillespie, Kidd & Coia as a practice. This did two things; firstly, it acted as both a check to existing information and critically provided new information by filling in some gaps in knowledge, as outlined above. Collaboration with Glasgow-based John Gilbert Architects permitted entry to an otherwise inaccessible former church, St. Martin's, Castlemilk, and to architects' drawings of the building. Additionally, a novel 3D laser-scan surveying technique was employed in the buildings visited, through collaboration with a specialist surveyor with the aim of capturing spatial information from an alternative perspective, and volumetric data that could not otherwise have been recorded. This also offers the possibility of creating a 3D aspect to this work in the preparation of an exhibition of sectional or tectonic models, in due course.

The analytical assessment of churches required a visual method of comparison that would allow them to be objectively scrutinized - a taxonomy of thematic information that may permit comparison with similar and contemporary architecture. Such a study - derived from the aforementioned literary and archival study in tandem with the first-hand knowledge obtained from the fieldwork outlined above (measurement, drawing, photography and collaboration with digital surveyors) of all of the firm's parish churches and a number of other ecclesiastical schemes, was devised. The aim was to collate sufficient graphical material to portray their work holistically, enabling the tracking of design decisions and devices throughout the lifespan of the practice. It is hoped that this will additionally demonstrate that in their substantial body of ecclesiastical work, the practice transcends a British-only context, and instead is comparable to an international design practice. Furthermore, it is hoped that it will contribute to understanding of the firm by providing analytical drawings of churches which are not readily accessible, or which are relatively unknown, by piecing together more fragmentary knowledge. Finally, the work in 'Architecture' aims to fill a gap in knowledge by presenting a detailed account of

ecclesiastical commissions where previously it has not existed as a single, comparative body.

The discussion of the firm's ecclesiastical work using common criteria lessens the possibility of bias or miscontextualisation due to the disregarding of certain examples. In this respect, in addition to the underpinning narrative of liturgy, a series of conventional architectural considerations will attempt to disentangle commonalities, differences and readings based on examination rather than solely on received wisdom.

Parallels

In 2009, the author spent a number of months in Rome, funded as a Rome Scholar, to test a theory that there may have been a direct link between contemporary new churches in Rome and Glasgow. The role of Gillespie, Kidd & Coia's Scottish Catholic clients as potential conduits for influence from Italian church architecture was an idea that derived from the firm's close relationship with the Catholic clergy in Scotland, and in particular, connections with Archbishop Mackintosh. This reveals Mackintosh's links with the Scots Pontifical College in Rome, and Achille Ratti (1857-1939), who would become Pope Pius XI (1922-39). Literary analysis, archival research at the Scots Pontifical College, discussion, and exhibition were the principal means of investigation. The author's participation in an exhibition at the British School at Rome, *Our Lives are Full of Remarkable Coincidences* attempted to display and summarise the work to date.[119] The exhibition was one of several organised throughout the academic year at the British School at Rome. The author's contribution to the Spring 2009 session, entitled *Faith & Rationality – Church Taxonomy Map 2009*, aimed to test part of the proposed research methodology - a taxonomy, or matrix of Gillespie, Kidd & Coia churches, contextualised with the firm's typologically similar Roman counterparts to test the concept of architectural exchange.

No concrete evidence was discovered, however the exercise did demonstrate that there were a number of architectural parallels between the Scottish designs and those of Rome; indeed rather than (only) British, and that the practice's ecclesiastical work had an international context in Italy.

[119] Robertson, J. (2009) *Faith & rationalty – church taxonomy map 2009.* Print on paper, at: British School at Rome. March 2009.

Another paper was delivered on return from Rome, at a conference hosted by HRC at the University of Warwick, entitled *The Postmodern Palimpsest: Narrating Contemporary Rome*. The paper, *Ecclesiastical Icons: Defining Rome through Architectural Exchange* aimed to contextualise the author's research within the concept of reading and re-defining the notion of Rome as a 'master narrative', and the concept looked at the impact of twentieth century churches on the periphery of Rome. This was connected to the author's research on Gillespie, Kidd & Coia by examining the idea of parallel twentieth century ecclesiastical design development in Rome and the Scottish Catholic dioceses. The paper was subsequently re-written for a chapter in the 2013 book, *Rome, Postmodern Narratives of a Cityscape*.[120]

[120] Robertson, J. (2013) 'Ecclesiastical icons: defining Rome through architectural exchange' *In* Holdaway, D. and Trentin, F.(eds.) *Rome, postmodern narratives of a cityscape.* London: Pickering & Chatto, pp. 137-153.

Part 1: Practice

1.1 Institutional History

Drawing on the practice background presented by Watters, and building on the accounts given by Rogerson, the contributors to *Mac Journal*, and the *Gillespie, Kidd & Coia, Architecture 1956-1987* exhibition, this section investigates the connected history of Gillespie, Kidd & Coia. It will examine the heritage of the firm from earlier incarnations under the leadership of James Salmon (Junior) (1873-1924) and John Gaff Gillespie (1870-1926), the catholic nature of the practice and its myriad contributors, and its nascent internationalism through many years of transitional rather than sudden change.

The heritage of the firm is demonstrated in the following chronological list of the practice begun by James Salmon in the nineteenth century, showing its various partnerships and eventual divergence:

c. 1825	James Salmon
1843	Black & Salmon (dissolved c. 1854)
1867/8	Salmon, Son & Ritchie
1872	James Salmon & Son
1903	Salmon, Son & Gillespie
1913	Gillespie continues the practice as already established, while James Salmon (Junior) practices alone under the pre-1903 title of James Salmon & Son (later, simply James Salmon FRIBA)
1926	Gillespie & Kidd
1927	Gillespie, Kidd & Coia

The firm of Gillespie & Kidd became Gillespie, Kidd & Coia in 1927, when William Kidd (1879-1929) took Jack Coia into partnership, following the death of John Gaff Gillespie in 1926. Kidd himself had died three years later, whereupon Coia inherited the practice as sole surviving partner.

The newly titled business originally developed from the nineteenth century practice of James Salmon (Senior) (1805-88)[121] established in Glasgow around a century earlier. If the widest reading of Gillespie, Kidd & Coia were sought, this would be the logical starting

[121] Dictionary of Scottish Architects 1840-1980. (2016) *James Salmon (senior)*. [Online] [Accessed on 21st June 2017] http://www.scottisharchitects.org.uk/architect_full.php?id=200029

point, but the large number of ecclesiastical commissions only began with the appointment of Jack Coia. The nineteenth and early twentieth century incarnations of the practice, however, were admired in their own right, having established a long architectural heritage and reputation in the Glasgow area and further afield. It was through them, for example, that Glasgow found itself at the technological forefront of construction, when they designed Lion Chambers (1904-07) in the city, for the lawyer W.G. Black.[122] It employed Hennebique's reinforced concrete construction system imported from France – one of only ten in Scotland (fig 2). Salmon's attitude to the modern potential of reinforced concrete is addressed in Rogerson, when Salmon proposes that

if this new material reinforced concrete, [it] could induce us to drop all the ridiculous accretions and absurdities which we plaster on to stone, it will indeed have lifted a weight from a world overladen with ornaments and decorators[123]

In another scheme, Jack Coia was apprenticed to the firm during the construction of the prestigious Stirling Municipal Buildings commission, which Salmon, Son & Gillespie had won in 1908, through competition (fig. 3).

It was also through Salmon, Son & Gillespie, that we first become acquainted with Park Circus, a nineteenth century development of exclusive townhouses in the West End of Glasgow above Kelvingrove Park. No. 22 was built by James Boucher (1826-1906) to a design by Charles Wilson (1810-63) between 1872-74[124] for the wealthy Glasgow industrialist, Walter McFarlane, owner of the city's Saracen Ironworks. In the late 1890s to early 1900s, Salmon, Son & Gillespie were commissioned to enact a programme of interior renovations, which included a billiard room (1905)[125] and domed anteroom[126]. A cast iron conservatory, manufactured at McFarlane's was also added to the rear[127].

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[122] Cusack, Patricia (1985) 'Lion Chambers: A Glasgow Experiment.' *Architectural History*, 28, 1985, pp. 198–211. www.jstor.org/stable/1568532.

[123] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson., p. 103.

[124]Riches, A. (1990) 'The west end' *In* Williamson, E., Riches, A., and Higgs, M. (eds.), *The Buildings of Scotland*. London: Penguin Books, p. 286

[125] Historic Environment Scotland (2017) *1-29 (inclusive nos)Park Circus and Park Street South.* [Online] [Accessed on 21st June 2017]
http://portal.historicenvironment.scot/designation/LB32238

[126] Riches, A. (1990) 'The west end' *In* Williamson, E., Riches, A., and Higgs, M. (eds.), *The Buildings of Scotland*. London: Penguin Books, p. 286

[127] Ibid. P. 286.

Fig. 2 Lion Chambers, Glasgow (1904-7), Salmon, Son & Gillespie: image shows the structural bays created by the reinforced concrete frame

Fig. 3 Stirling Municipal Buildings (1907), Salmon, Son & Gillespie

The building, by the time it had been worked on by Salmon, Son & Gillespie, was evidently a source of some pride amongst not only the Glaswegian Italian community, but also Britain as a whole. In 1935, *L'Italia Nostra,* the organisation representing the Fascist Party in Britain, reported that the Casa d'Italia 'which brings together in its bosom all the life blood of the colony', was home to

enormous and splendid rooms which are distributed among the various Associations. The billiard room, reading room, conference room, ballroom and restaurant complete the organisation of the Casa which constitutes, for whoever visits Glasgow, a great source of pride.[128]

Salmon, Son & Gillespie collaborated on Park Circus with a group of sculptors in whose work James Salmon (Junior) had taken an interest while studying at the Glasgow School of Art. Francis Derwent Wood, Albert Hodge and Johann Keller were the artists involved, probably in the scheme's woodcarving features.[129] The collaboration raises a notable point; that soon after the Park Circus commission, students attending Modelling classes at the Glasgow School of Art would begin to receive training in architectural drawing. These were directed by Johann Keller until 1908.[130] Other sculptors, such as Archibald Dawson (1892-1938), Head of Department for Modelling, Sculpture and Ceramics (c.1923-33) would collaborate with the firm in its later incarnation of Gillespie, Kidd & Coia, during the 1930s[131].

In 1935, 22 Park Circus was sold and became the *Casa d'Italia*, a social club begun by Italian fascists. The building was taken over by the British authorities in 1939, and returned to the Italians in 1946.[132] It subsequently became the Italian Consulate. However, this was not the only connection the firm held with Park Circus. Having converted a room previously used as an operating theatre at no. 19, the Archbishop's house, between 1948-

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[128] As described by *L'Italia Nostra* on 6th September 1935, *in* Bowd, G. (2013) *Fascist Scotland: Caledonia and the far right.* Birlinn Limited. Edinburgh, p. 83.

[129] Riches, A. (1990) 'The west end' *In* Williamson, E., Riches, A., and Higgs, M. (eds.), *The Buildings of Scotland*. London: Penguin Books, p. 286

[130] University of Glasgow History of Art and HATII (2011) *Mapping the Practice and Profession of Sculpture in Britain and Ireland 1851-1951:The Glasgow School of Art: Modelling Classes*. [Online] [Accessed on 28th May 2017] http://sculpture.gla.ac.uk/view/event.php?id=msib6_1221750765

[131] Ibid.

[132] Severgnini, B. (4th ed.) (2008) *An Italian in Britain.* Milan: RCS Libri S.p.A., No page nos.

55, the practice office - which by that time had become Gillespie, Kidd & Coia - moved from Waterloo St. next door to the Archbishop's house to no. 20, where Jack Coia himself lived. It has already been noted that this may have been a strategic business move by Coia to be quite literally on the doorstep of the Archdiocese. This proximity and mutual benefit is highlighted by Rogerson in the more mundane matters of building maintenance that Coia was sometimes engaged in by the Archbishop, as 'the architect next door'.[133]

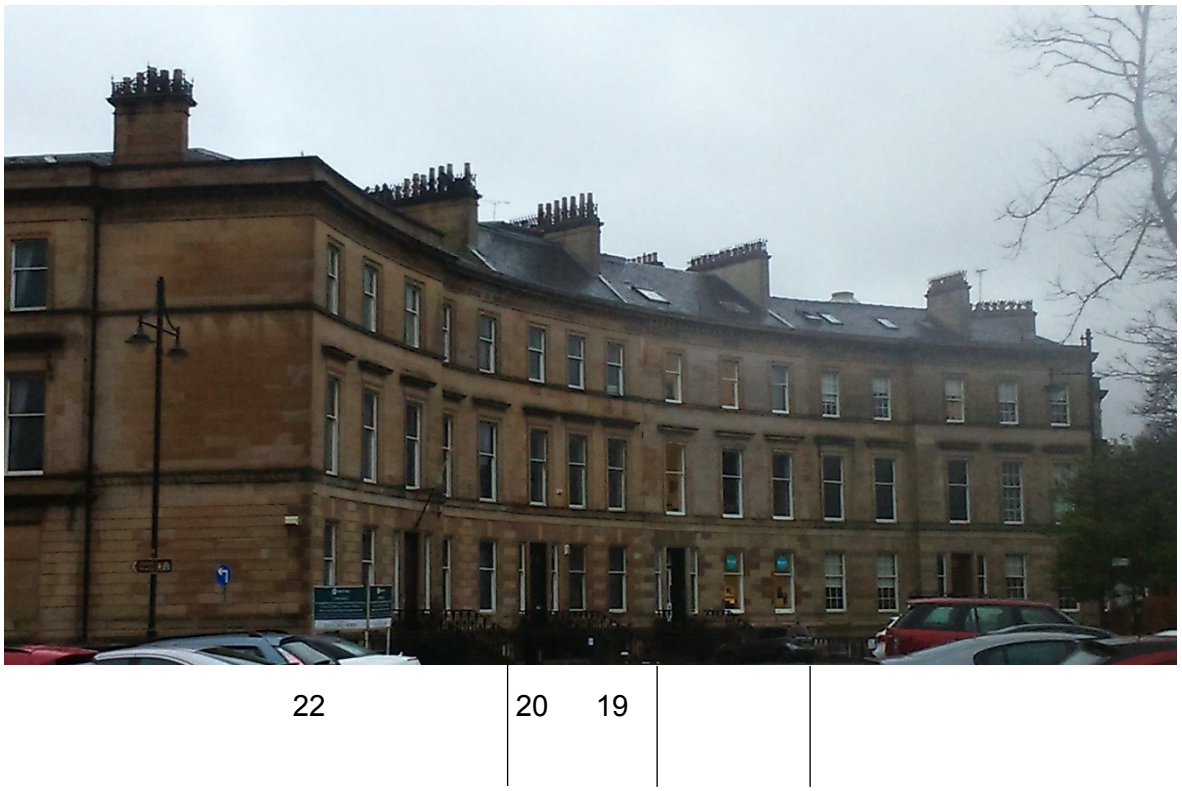

Fig. 4 Park Circus, Glasgow, showing nos. 22 (Ex-*Casa d'Italia),* 20 (Gillespie, Kidd & Coia office and home to the Coia family), and 19 (Archbishop's house) (Author)

During the immediate post-1903 phase of Salmon, Son & Gillespie, when James Salmon (Junior) and John Gaff Gillespie had been acknowledged as partners by Forrest Salmon, Jack Coia, at that time still a child, had embarked on a thoroughly Roman Catholic formation. He attended St. Michael's RC Primary School in Parkhead, and later, St. Aloysius College, which by that time had relocated from Gasgow's East End to its current location in Garnethill. The Coia family's choice of the independent, fee-paying Jesuit college for their son's secondary education was perhaps an aspirational one, and certainly responded to its mission to create a 'reputation as the educational institution of choice for

[133] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p. 42.

Catholics in Glasgow'.[134] It is also perhaps no coincidence that a substantial tranche of Coia's formative years were spent in such an iconic setting as St. Aloysius, very close to the Glasgow School of Art. Architecturally, the church, opened in 1908, is symbolic in Glasgow, loosely reflecting the elevational massing of the Jesuits' mother church in Rome, Il Gesu - a proto-Baroque building significant in the Counter-Reformation.[135] The architect of St. Aloysius, Charles Jean Ménart, had studied at the Glasgow School of Art from 1893-98, before setting up in practice, and subsequently collaborating with John Stirling Jarvie. Jarvie had previously been apprenticed to a number of practices, including that of John James Burnet and John Archibald Campbell (1859-1909), and it is likely that he met Ménart there.[136] Historically, it seems that, through Ménart, both a patronage and stylistic precedent had been set for the early years of the Gillespie, Kidd & Coia practice. The majority of Ménart's work was undertaken for the Archdiocese of Glasgow, for whom he was able to offer a 'Roman Baroque alternative' to the Romanesque and Gothic of Sebastian Pugin Powell.[137] Coia's later assertion that his churches were 'transitional'[138] was certainly true in a material sense, but the Roman Catholic Church's 'addiction'[139] to Gothic had already been challenged by an architect who was as comfortable working in different stylistic idioms as Coia later became.

Prior to Coia taking over the running of the firm, he had been architecturally trained during a period of great change. In an academic setting, the turn of the century saw the creation of the Glasgow School of Architecture, where he trained, through institutional consolidation of the Glasgow School of Art with the Royal Technical College, under the directorship of Eugène Bourdon (1870-1916). Bourdon had himself been trained at the Ecole des Beaux-Arts in Paris during the 1890s under Honoré Daumet and Charles Girault. When he accepted the post of Director of Architectural Studies and Professor of Architectural Design at the Glasgow School of Architecture, Bourdon imported the Beaux-

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[134] St. Aloysius' College (2015) *Our values, our history.* [Online] [Accessed on 21st June 2017] https://www.staloysius.org/our-values/our-history-46

[135] St. Aloysius' College Petrasancta Society (no date) St. Aloysius' church heraldry. [Online] [Accessed on 21st June 2017] http://www.nunraw.com/SACMUS/church.htm

[136] Dictionary of Scottish Architects (2016) Menart & Jarvie (or Ménart & Jarvie). [Online] [Accessed on 21st June 2017] http://www.scottisharchitects.org.uk/architect_full.php?id=201731

[137] Dictionary of Scottish Architects (2016) Charles Jean Menart (or Ménart) [Online] [Accessed on 21st June 2017] http://www.scottisharchitects.org.uk/architect_full.php?id=200554

[138] Coia, J. (1969) 'Royal Gold Medal address.' *Building,* 27th June.

[139] Ibid.

Arts as the school's design ethos. The success of this was considerable, and Crinson and Lubbock assert that Glasgow had 'probably [come] closer to the Parisian system than any other British school.[140] The Beaux-Arts stance had not been entirely new to Glasgow, however, as John James Burnet (1857-1938) had already made his mark on Glasgow's commercial architecture, having studied under Jean Louis Pascal at the Ecole des Beaux-Arts during the 1870s. John Keppie (1862-1945) was another Glaswegian architect to have attended Pascal's atelier in Paris, at least for a short period during the 1880s.

Coia first appeared as 'Jack A. Coia' on the Glasgow School of Art Alphabetical Register for the academic year 1917-18, when he was 19 years old. As a student, as well as at school, Coia demonstrated drawing talent as a student, having won both the Glasgow School of Architecture Club Prize for Measuring and, along with John Gillespie (not of the firm in question), the Haldane Bursary[141].

During the period in which he was enrolled at the School of Architecture, in addition to Gillespie's practice, Jack Coia also worked for both Alexander Nisbet Paterson (1862-1947) and A.D. Hislop, respectively.[142] Paterson, whose family had known the Burnets, also trained in Pascal's atelier at the Ecole des Beaux-Arts, beginning in 1883, on John James Burnet's recommendation.[143] Hislop had himself been apprenticed to Paterson and later became partner to John Archibald Campbell (1859-1909). Coincidentally, Campbell was born at 20, Park Circus, subsequently the family home of the Coia family, and address of the Gillespie, Kidd & Coia practice.

During the academic year 1919-20, Coia's third year of enrolment, Edward G. Wylie (1885-1954) was his Studio Instructor. Wylie had trained under Bourdon, beginning a full-time course there the same year that Bourdon became the re-organised school's Director of Architectural Studies and Professor of Architectural Design. Wylie is noted to have 'become close to Bourdon' as one of his most talented students.[144] The Beaux-Arts

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[140] Crinson, M. and Lubbock, J. (1994) *Architecture, art or profession? Three hundred years of architectural education in Britain*. Manchester: Manchester University Press., p. 84.

[141] Glasgow School of Art (1917-18) *Alphabetical Register*.

[142] Dictionary of Scottish Architects (2014) *Jack Antonio Coia* [Online] [Accessed on 15th February 2015] http://www.scottisharchitects.org.uk/architect_full.php?id=200542

[143] Dictionary of Scottish Architects (2016) *Alexander Nisbet Paterson* [Online] [Accessed on 28th May 2017] http://www.scottisharchitects.org.uk/architect_full.php?id=200361

[144] Dictionary of Scottish Architects (2016) *Edward Grigg Wylie* [Online] [Accessed on 28th May] 2017http://www.scottisharchitects.org.uk/architect_full.php?id=200762

training that Wylie received was then reinforced in his subsequent apprenticeship to John Burnet & Son, and re-used when Bourdon appointed him to teach part-time at the Glasgow School of Architecture, in 1909. In 1919, Wylie accepted the position of Instructor, and Professor of Architecture and Head of Glasgow School of Architecture for a short tenure beginning the following year, as the successor of Bourdon[145].

As Watters records, the latent influence of the Beaux-Arts design approach during the first two decades of the twentieth century, on the future practice of Gillespie, Kidd & Coia, was very strong.[146] This was reinforced by distinguished draughtsmanship from figures such as James B. Fulton, Director of Studies by the time Coia reached his fifth year of study, who was known for his drawing talent, along with the perspective draughtsman, Alexander McGibbon, who worked with Paterson at Burnet, Son & Campbell in 1889, before becoming Professor and Director of the Glasgow School of Art in 1900. Jack Coia's student work is also described in Beaux-Arts terms by Rogerson,[147] who also draws our attention to Coia's talent as a student within the Beaux-Arts teaching structure.[148]

According to Coia's daughter, her father's talent as a draughtsman was noticed from an early age. Indeed his gift for drawing convinced his educators at St. Aloysius that his career trajectory would be that of an artist.[149] Coia was able to nurture this talent when, aged 17, having answered an advertisement for an architect's apprenticeship, he was articled to John Gaff Gillespie. That he was subsequently invited by Kidd to assist in the continued practice of the business, is an indication of the esteem within which he was placed by the firm.[150] From 1915, the year in which he began his apprenticeship, Coia had demonstrated his architectural potential through his absorption of the practice's ethos. This he achieved through the tracing of drawings produced in the office in combination with his academic achievements. Later, study trips to Europe (particularly to Italy) would work further to his credit with a practice whose main personalities (James Salmon and John Gaff Gillespie) had also participated in their own 'Grand Tours' of Europe previously.

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[145] Ibid.

[146] Watters (2016) *St. Peter's, Cardross birth, death and renewal.* Edinburgh: Historic Environment Scotland in association with NVA, pp.40-2.

[147] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p.5.

[148] Ibid.

[149] In conversation with Jacqueline Coia, January 2007.

[150] Dictionary of Scottish Architects (2014) *Jack Antonio Coia* [Online] [Accessed on 15th February 2015] http://www.scottisharchitects.org.uk/architect_full.php?id=200542

Gillespie had taken William Kidd into partnership in 1918, having been apprenticed himself to the practice in 1898, when it was still known as James Salmon & Son.

Several other apprentices and assistants formed the Gillespie practice following his separation from James Salmon (Junior) in 1913 approximately until he took Kidd into partnership. Of these, Jack Coia was one of the few who spent a number of years at the practice headed by Gillespie, as apprentice (1915-18), and whose capabilities were recalled in later years when Kidd invited him back. Unlike George Shaw Shand (1896-1976), apprenticed from 1913-23, Coia was exempt from war service due to his poor eyesight.[151] Two other young men, William Mollison and David Carmichael, had also undertaken apprenticeships, which had begun before the dissolution of the practice with James Salmon (Junior). Kidd, who had himself been apprenticed to James Salmon & Son in 1898, working his way up eventually to the role of partner in 1918, would have known them. Kidd's reason for inviting Coia back is not known, but in the firm's commission for the rooftop extension to Glasgow's Ca'd'Oro building, the concrete structure of which may have followed from their experience of Lion Chambers, it seems possible that Coia's Italian background and study trip to Italy in 1923 may have played a part in Kidd's choice. After all, as Rogerson asserts, 'J. Gaff Gillespie had left only a rough sketch for the job.'[152]

Immediately after the First World War, the practice employed relatively few other employees. It became Gillespie, Kidd & Coia when Coia returned to the practice following a period in London at the practice of Hollis & Welch. At that time, the office consisted of a very small body of staff, reflecting a diminishing commission list that included, apart from the Ca'd'Oro extension, the Léon hairdressers shopfront on St. Vincent Street, Glasgow, where the practice's office was situated at that time.

Following the engagement of the firm by the Archdiocese of Glasgow, and The Glasgow School of Architecture's engagement of Jack Coia on their teaching team, both the number of commissions and the number of office staff rose. With a small number of exceptions (Brierlands, a private house built for James Russell in 1936, and Knightswood Secondary School, begun in 1939), the practice's principal income during the 1930s derived from commissions from the Roman Catholic Church. After the Second World War, the practice enjoyed an increase in commissions of all types.

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[151] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p.5.

[152] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p. 16.

Coia's teaching involvement at the Glasgow School of Architecture began in 1929, after Kidd's death, and continued throughout the period leading up to the Second World War. Although the appointment undoubtedly exposed him to both students – some of whom would subsequently be employed by Gillespie, Kidd & Coia – and colleagues - who would collaborate with the firm, it was also something of a financial necessity given the lack of practice commissions at the start.

Prior to their first ecclesiastical commission, the practice consisted of Kidd, Coia, and Duncan McCulloch (1911-1959), who had joined the firm in 1926 as an apprentice, a position he held while undertaking evening classes at the Glasgow School of Architecture, until 1930. McCulloch's apprenticeship transferred to the newly named Gillespie, Kidd & Coia, and was then joined in this junior role by his peer, Thomas Warnett Kennedy (1911-2000). McCulloch may well have become temporarily reacquainted with Coia during the war when he worked as Sam Bunton's chief assistant, repairing war damaged Clydeside in 1941, and whom Coia assisted, following the temporary wartime closure of Gillespie, Kidd & Coia.[153]

As discussed in the Introduction, the concept of modernism was accessible to young architects by the 1930s, and as Crinson & Lubbock acknowledge, it had 'infiltrated schools [of architecture]' in the interwar period by methods such as the Bauhaus.[154]

Kennedy was something of a political figure in architectural education. As editor of the Glasgow School of Architecture publication, *Vista***,** he was familiar with contemporary European architects and art critics such as Hans Poelzig, Ragnar Ostberg, R.H.Wilenski, and others. In practical terms, the significance of this exposure may have been acknowledged in commissions such as St. Peter in Chains (1938), an also set a precedent for a moderate form of modernism, which would develop after the war.

The first phase of Gillespie, Kidd & Coia as a newly named practice, until the start of the Second World War, saw six ecclesiastical schemes created, all for the Archdiocese of Glasgow, beginning in 1931 with St. Anne's RC church and presbytery, Whitevale Street, Dennistoun, finally opening in 1935. The practice and the Archdiocese of Glasgow – under whose control the parish fell – appear to have formed a good working relationship as the second commission, St. Patrick's RC church and presbytery, Greenock (subsequently ceded to the Diocese of Paisley in 1947) followed in 1934, with the church actually opening in 1935. Following St. Anne's and St. Patrick's was St. Columbkille's

[153] Both McCulloch and Warnett Kennedy subsequently emigrated to Canada.
[154] Crinson, M. and Lubbock, J. (1994) *Architecture, art or profession? Three hundred years of architectural education in Britain*. Manchester: Manchester University Press., p. 190.

church and presbytery, Rutherglen(subsequently ceded to the Diocese of Motherwell), the design for which was exhibited in 1935, though not actually completed until 1939. In 1936, the Archdiocese of Glasgow quickly followed with another commission, St. Peter-in-Chains, opening in 1938 (subsequently ceded to the Diocese of Galloway), this time further afield in Ardrossan. 1938 was a significant year for the practice, as they also undertook the design and build of the Roman Catholic Pavilion (as well as the Palace of Industries North) for the Glasgow Empire Exhibition, and began the final pre-war design of St. Columba's, Hopehill Road, for the Archdiocese of Glasgow, which opened the following year.

When the firm received the commission to design St. Anne's RC Church in Dennistoun, Jack Coia had increased the staff team accordingly. By 1931, Alexander Buchanan Campbell (1914-2007) had replaced MCulloch and Warnett Kennedy as apprentice; however his tenure only lasted for a year. By this time Warnett Kennedy had increased responsibility in the office in the capacity of Coia's first senior assistant, having undertaken a short period of experience of around a year between his apprenticeship and role of senior assistant, with Honeyman & Jack. Warnett Kennedy was Coia's senior assistant at the time of the first two church commissions, St. Anne's and St. Patrick's, with Richard Webber (1910-90) acting as chief assistant from 1932-34, Colin Middleton (1909-95) as assistant in 1933, and McCulloch as chief junior assistant from 1930-32.

In 1931 Ronald Watson Young joined the practice as chief draughtsman, remaining in post until 1935. He was joined by Helen Jackson from 1934-35. Jackson later married to Ninian Johnston (1912-90), Deputy Editor of, *Vista*[155] during the early 1930s, and contributor to *RIAS Quarterly*. Through his editorship of *Vista*, Johnston was vocal about his views on contemporary modernism, with all its 'gloriously white and shining silver' healthful virtues.[156] Buchanan Campbell then returned to the practice for a year in 1936 as an assistant, subsequently undertaking a period as a studio tutor at the Glasgow School of Architecture himself.[157] From the 1950s, Buchanan Campbell would himself engage in

[155] McKean, C. (1987) *The Scottish Thirties - An Architectural Introduction.* Edinburgh: Scottish Academic, p. 30.

[156] Ibid. P.31.

[157] Dictionary of Scottish Architects (2016) *Alexander Buchanan Campbell* [Online] [Accessed on 21st June 2017] http://www.scottisharchitects.org.uk/architect_full.php?id=204759

commissions for the Roman Catholic Church in the Diocese of Motherwell[158], in addition to his later well-known modernist design for Dollan Baths.

The mid-1930s were a busy time for the practice, with St. Patrick's, Greenock, St. Columbkille's, Rutherglen, and St. Columba's, Glasgow, all designed and built following the success of St. Anne's. It is perhaps for this reason that there was a correspondingly high proportion of employees, with Kennedy continuing as First Senior Assistant, Richard Webber (1910-90) working alongside him as Chief Assistant from 1932-34), and Colin Middleton (1909-95) as Assistant in 1933. Watson Young and Jackson held their respective posts as Chief Draughtsman and Draughtsman, respectively, until 1935. Accordingly, the practice seemed to have the resources - both in project capacity and in mentoring - to take on new apprentices.

Accordingly, in 1933, following the completion of St. Anne's, the practice engaged Coia's brother, John (1914-2004) and Alan Carruthers (1915-) in that role; a position that Coia's brother held until 1938, and Carruthers until sometime before 1939, by which time he was working for Burnet, Tait & Lorne.[159] John Coia would return to the firm again in the early 1950s.

In 1938, after a brief period working for Alasdair Cameron Sutherland, Warnett Kennedy returned to the practice as partner. This was also the year in which he established the monthly magazine, *The Scottish Architect and Builder's Journal*, which reached out to professions beyond the strictly architectural, including contract details and information on building research. However, as McKean asserts, its true worth centred on the *Entasis* column, which presented buildings little known elsewhere.[160] This, along with his previous editorship of *Vista*, suggest potential influence on work from 1938 following his partnership, in particular St. Peter-in-Chains. Coia conceded that the Roman Catholic Pavilion, also erected in 1938, obliged him to be 'modern', which we could interpret to mean the result of the outward-facing context of an international exhibition,[161] but

[158] Canmore (2017) *Alexander Buchanan Campbell* [Online] [Accessed on 21st June 2017] https://canmore.org.uk/collection/1176312

[159] Dictionary of Scottish Architects (2017) *Alan John Carruthers* [Online] [Accessed 28th May 2017] http://www.scottisharchitects.org.uk/architect_full.php?id=100461

[160] McKean, C. (1987) *The Scottish Thirties - An Architectural Introduction.* Edinburgh: Scottish Academic, p. 32.

[161] Ibid. P. 135.

Kennedy's interest in modern building materials was here surely also put into practice, asserting that

Bakelite, chromium alloys, artificial silk, oil products, reinforced concrete, glass wool, asbestos, plywood, cork and rubber; the modern architect tries to discover the language of their form, and so a new aesthetic develops.[162]

According to McKean, in the 1930s, the London-based architectural press tended to avoid lengthy coverage of Scottish achievements in publications such as the *Architectural Review,* and the *Architect's Journal*, so the profession in Scotland depended on publications such as *RIAS Quarterly, Building Industries,* and Kennedy's *Scottish Architect and Builder's Journal*. Their young editors were keen to demonstrate the journals' contemporary relevance, as demonstrated by Mervyn Noad's gratifying statement in 1933, that 'with articles on modern continental work and architectural theory, the Journal has.....been brought abreast of the time'[163].

Alhough McKean's assertion that young Scottish editors were aware of foreign architectural case studies, including those from continental European nations such as France, Holland and the Scandinavian countries, those who have looked for precedent in the early period of Gillespie, Kidd & Coia, tell of a variety of potential design influences for their church schemes. These are somewhat generic for the early phase buildings because it is difficult to discern any single precedent for any one building. This is best summed up by Neil Baxter, writing in the MacJournal in 1994, that

In reviewing Gillespie, Kidd & Coia's output of the Thirties there is a strong temptation to seek out sources. Yet, while Coia freely borrowed ideas from, and alluded to, an extraordinarily broad range of structures, historic and modern, the temptation to ascribe elements to specific precedents is, ultimately a fruitless endeavour. A man of extremely catholic tastes, Coia was able to assimilate styles and details and adjust them to fit his particular site, client and inevitably restrictive budget.[164]

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[162] Thomas Warnett Kennedy in McKean, p. 44.

[163] McKean, C. (1987) *The Scottish Thirties - An Architectural Introduction.* Edinburgh: Scottish Academic, p. 32.

[164] Baxter, A. (1994) 'Early Coia buildings.' *Mac Journal*, 1, p. 15.

A number of writers shed some light on these 'freely borrowed ideas', and do in fact link building details with specific precedents, though these are frequently subjective. Writers have variously ascribed historical styles to the work, from the simplified 'Italian, Romanesque, or Byzantine'[165] manner discussed by Watters, to Rogerson's specific - though circumstantial - likening of details of St. Anne's to Longhena's Baroque masterpiece, Santa Maria della Salute, Venice (1631). Additionally, the mixed early Romanesque churches of Lucca in the 'high gable feature' [166] of St. Columba's, contrasted internally to its 'lofty Gothic nave'.[167]

Further eclectic sources are cited in this regard, which draw upon the early twentieth century brick forms of the Dutch Expressionists - Dudok and Behrens[168], and German ecclesiastical work of Bohm, Schwarz and Steffann[169]. Baxter and Rogerson liken the campanile of St. Peter-in-Chains to Ragnar Ostberg's tower of Stockholm Town Hall, while Watters acknowledges a debt to Charles Rennie Mackintosh in the Roman Catholic Pavilion's curved, white-harled forms and iron screen[170]. Baxter also acknowledges that Coia's formative years in the North London suburbs may have contributed to the early designs, presumably in the unified brick Arts and Crafts suburban centres such as Cricklewood.

After almost a decade of interesting and experimental design work for the Roman Catholic Church, after 1939 no further apprentices or assistants were appointed. James Kirkwood was the last, arriving in 1936 and leaving by 1939. By that point the practice consisted solely of Coia and Kennedy, but even with so few staff it was forced to cease operating during the war years as Coia's Italian background had caused him to be regarded with suspicion by the State. However, it was during this this time that Coia, according to Rogerson, began a Town Planning degree and assisted Sam Bunton (1908-74) in

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[165] Watters (2016) *St. Peter's, Cardross birth, death and renewal.* Edinburgh: Historic Environment Scotland in association with NVA, p. 45.

[166] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p. 22.

[167] Baxter, A. (1994) 'Early Coia buildings.' *Mac Journal*, 1, p. 17.

[168] Baxter, A. (1994) 'Early Coia buildings.' *Mac Journal*, 1, p. 16.

[169] Watters (2016) *St. Peter's, Cardross birth, death and renewal.* Edinburgh: Historic Environment Scotland in association with NVA, p.16.

[170] Watters (2016) *St. Peter's, Cardross birth, death and renewal.* Edinburgh: Historic Environment Scotland in association with NVA, p.46.

repairing war damaged Clydebank. The connection between Coia and Bunton may be multi-facetted. Commencing practice in 1930, Bunton's office was situated on St. Vincent St., which was also home to Gillespie, Kidd & Coia for the majority of the 1930s. Although they had both sought experience with other practices after leaving Gillespie, Kidd & Coia earlier in the1930s, it is perhaps also for reasons of familiarity that two of Gillespie, Kidd & Coia's former apprentices; Duncan McCulloch and Richard Webber, in 1939 and 1941 respectively, sought employment with Bunton. Webber had also been employed by the War Damage Repair Department from 1939. Furthermore, in Kennedy, Gillespie, Kidd & Coia possessed the interests of one of the brightest young architects on the Glasgow professional scene. In 1931, amidst post-First World War Planning debates, Kennedy, whose professional career was still in its infancy, was instrumental in Glasgow lobbying the Department of Health for the need for a National Plan, more than a decade before work began on Abercrombie's Clyde Valley Plan.[171] This, coupled with Kennedy's interest in the liberating architectural potential of new materials, as demonstrated at the Roman Catholic Pavilion, suggested that Gillespie, Kidd & Coia appeared to possess the intellectual and pragmatic credentials capable of transferral to the large-scale modern repair work in Clydebank, and complemented Bunton's own research into the use of alternative materials and construction methods.

Immediately after the end of the Second World War, Gillespie, Kidd & Coia re-opened with Coia as sole employee; Kennedy having decided to leave the practice and the UK entirely when he emigrated to Canada. Within a very short period, however, Coia had begun to recruit again, though it would be many years before he appointed anyone else as partner in the firm. With the renewal of ties with the Roman Catholic Church, the practice had soon secured two commissions, Holy Family, Port Glasgow, first appearing in the *Catholic Directory* in 1947.[172] The commission for St. Joseph's, Greenock, came shortly after, first appearing in the Catholic Directory in 1948.[173] By 1949, the re-ordered dioceses appear in print in the *Catholic Directory*, with the two towns transferring from the Archdiocese of Glasgow to the Diocese of Paisley.

Isi Metzstein, a *kinder transport* refugee from Berlin, was the first of the post-war apprentices to be associated with the firm, an engagement that would last from 1945 for

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[171] McKean, C. (1987) *The Scottish Thirties - An Architectural Introduction.* Edinburgh: Scottish Academic, pp. 21-22.

[172] *Catholic Directory 1947* (110) London: Burns, Oates & Washbourne., p. 525. Source: Salford Diocesan Archives.

[173] *Catholic Directory 1948* (111) London: Burns, Oates & Washbourne., p. 404. Source: Salford Diocesan Archives.

around forty years, until the practice closed. His obtaining of the apprenticeship accompanied evening classes at the Glasgow School of Architecture. In architectural thinking, according to Pevsner (cited in Crinson and Lubbock[174]), after the beginning of the Second World War, Britain experienced a period of transition, 'pending a restatement of the problem in contemporary terms'. Over the course of the next decade, as Proctor acknowledges, the 'general principles' of architectural modernism had been recognised by architects.[175] From the end of the war, Gillespie, Kidd & Coia approached the problem of modern ecclesiastical design in different ways; one which would create a modern form of basilican church from its pre-established pre-war pattern, and another which would embrace a more forceful alternative, which looked to pioneering modernists such as Le Corbusier.

Until 1954, the practice remained very small, with Coia as sole partner and Metzstein as apprentice until 1950. After the end of Metzstein's apprenticeship in that year, the practice embarked on its next significant number of church commissions; a time when post-war austerity had caused material shortages, yet a need to build replacement churches due to war damage or new churches for new residential areas. A new wave of piety accompanied this immediate postwar building trend, which is reflected in the firm's numerous narrow brick-built basilican churches as well as the larger examples of St. Laurence's, Greenock, and St. Michael's, Dumbarton.

John Coia had returned to the practice by the early 1950s, and his name appears to be linked to a number of ecclesiastical jobs. These included not just parish churches, but also a Jesuit chapel at the Catholic Retreat House at Craighead (1956), created from an existing conservatory,[176] and a presbytery for St. Peter-in-Chains Church, which had been built before the war. He also appears as project architect for St. Michael's Church, Dumbarton in 1952.[177] The day to day running of projects was, as Patrick Nuttgens writing for the *RIBA* Journal in 1966, asserts, was the responsibility of a particular member of staff.[178] Jack Coia, as partner, intervened as projects developed to ensure that quality was maintained.[179]

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[174] Crinson, M. and Lubbock, J. (1994) *Architecture, art or profession? Three hundred years of architectural education in Britain*. Manchester: Manchester University Press., p. 108.
[175] Proctor, R. (2014). *Building the modern church.* Farnham: Ashgate Publishing Limited., p. 69.

[176] Dictionary of Scottish Architects 1840-1940 (2016) *John Peter Coia* [Online] [Accessed 3rd July 2017] http://www.scottisharchitects.org.uk/architect_full.php?id=200832
[177] Letter referencing telephone conversation between Jack Coia and Edwards, Jamieson & Co. Ltd. (Structural Engineeers). 18th April 1952. Ref. J1179/JC/JW. Source: GSA Archives.
[178] Nuttgens, P. (1966) 'St. Bride's: an appraisal.' *RIBA Journal,* 73 (4), pp. 170-9.
[179] Letter referencing telephone conversation between Jack Coia and Edwards, Jamieson & Co. Ltd. (Structural Engineeers). 18th April 1952. Ref. J1179/JC/JW. Source: GSA Archives.

New members of staff were recruited accordingly, beginning with Andy MacMillan, who came to the firm as an architectural assistant in 1954. Prior to his previous role with *Glasgow Development Corporation*, MacMillan had studied with Metzstein at the Glasgow School of Architecture. Now supporting a principal architect and two architectural assistants, the practice was beginning to revert to the critical mass of employees and commissions to be able to support the engagement of further apprentices. Alexander McGregor[180] also joined the firm in 1954 as an apprentice while studying at the Glasgow School of Architecture, and worked under the mentorship of Isi Metzstein.

In addition to Coia, Metzstein and MacMillan, by 1960, the firm had appointed four other architectural assistants. While ecclesiastical schemes were not their only commissions, they comprised a significant part of the practice's work. Ian Grant Rogers (1927-91) worked at Gillespie, Kidd & Coia from 1955-63[181], followed by Charles MacCallum (1935-2013), from 1957-67[182], Joseph FitzGerald from 1958-9[183], and Derek Mickel from 1959-62.[184] Gerry Barrett entered the practice as an assistant in 1957, but did not qualify.[185]

In the 1960s, John Cowell, Miroslaw Lutomski, Robert Hamilton Macintyre (1940-97)[186] and Robert Pringle Walkinshaw increased the practice further; Cowell and Walkinshaw becoming partners in 1975, just prior to Coia's retirement.[187]

Artist collaboration

In addition to the employment of a large number of architectural staff over the lifetime of the practice**,** repeated collaboration with certain artists and sculptors in their ecclesiastical

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[180] Dictionary of Scottish Architects (2017) *Alexander G. McGregor* [Online] [Accessed 28th May 2017] http://www.scottisharchitects.org.uk/architect_full.php?id=406859

[181] Ibid., *Ian Grant Rogers* http://www.scottisharchitects.org.uk/architect_full.php?id=406859

[182]Watters (2016) *St. Peter's, Cardross birth, death and renewal.* Edinburgh: Historic Environment Scotland in association with NVA., p.51.

[183]Dictionary of Scottish Architects (2017) *Joseph FitzGerald* [Online] [Accessed 28th May 2017] http://www.scottisharchitects.org.uk/architect_full.php?id=407718

[184]Ibid. *Derek Mickel* http://www.scottisharchitects.org.uk/architect_full.php?id=404022

[185] Watters (2016) *St. Peter's, Cardross birth, death and renewal.* Edinburgh: Historic Environment Scotland in association with NVA., p.51.

[186]Dictionary of Scottish Architects (2017) *Robert Hamilton Macintyre* [Online] [Accessed 28th May 2017] http://www.scottisharchitects.org.uk/architect_full.php?id=403309

[187] Ibid., *John Allain Maurice Cowell* http://www.scottisharchitects.org.uk/architect_full.php?id=403747 and *Robert ('Bob') Pringle Walkinshaw* [http://www.scottisharchitects.org.uk/architect_full.php?id=403318

work equally shows stylistic change over a number of decades. Benno Schotz was one such sculptor who enjoyed repeat commissions. These began before the Second World War with the marble panel and crucifix designed for the sanctuary wall of St. Columba's, Woodside.

As noted in the Literaure Review, after the war, the use of non-Catholic artists in work for the Roman Catholic Church is discussed in Proctor, with the example of Jacob Epstein's well-received sculpture of the Madonna and Child at the Convent of the Holy Child Jesus, on Cavendish Square, London (1951-53). Schotz, whose (post-war) work was often said to bear similarities with Epstein's, is interesting in terms of his relationship with the Roman Catholic Church, via Gillespie, Kidd & Coia, as Epstein's relationship with the Church had been with the Cavendish Square commission.[188] Schotz was commissioned to design a sculptural panel at the entrance to St. Matthew's, Bishopbriggs, one of the first churches to be designed by Gillespie, Kidd & Coia after the Second World War, before being commissioned again to design the well-known crucifix sculpture for St. Paul's, Glenrothes, and the Stations of the Cross at St. Charles Borromeo. The latter two commissions in particular reflect what at the time was evidently the delicate matter of employing a non-Catholic artist in design work for the Catholic Church.

To compound this, Schotz recounted to Coia, a personal friend, how he had felt 'blacklisted' by the Church, to which Coia attributed Schotz's (artistic) association with the Communist, Paul Robeson. Schotz had been interested in Epstein's bronze bust of Robeson, and a meeting with him had followed to evaluate how Epstein had achieved the piece.[189]

Gillespie, Kidd & Coia, through their own direct patronage of Schotz in their architectural work, to divert such attention and eventually cause Schotz's work to be positively endorsed. In addition to the Stations of the Cross that Schotz designed for St. Charles Borromeo, Schotz was asked to design the Altar Cross for St. Paul's, Glenrothes. Father Grace, the priest at St. Paul's, initially concealed the fact to the Archbishop, telling him simply that 'a bloke from Glasgow did it'.[190] Some time later, the same Archbishop praised the work at a meeting with Jack Coia's brother, the caricaturist and art critic, Emilio Coia, declaring it 'fit for the Vatican'.[191]

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[188] Ibid., p. 117.
[189] Schotz, B. (1981) *Bronze in my blood*, the memoirs of Benno Schotz. Edinburgh: Gordon Wright Publishing., pp. 207-8.
[190] Ibid,, p. 211.
[191] Ibid., p. 212.

1.2 Patronage Context

The patronage context within which Gillespie, Kidd & Coia operated again requires wider contextual parameters to be observed. The role that the Archdiocese of Glasgow, and later, other dioceses, played in ecclesiastical commissions such as church building, was often linked to social reasons, including an increase in the Catholic population, and economic fluctuation. This section will explore the atmosphere and attitude of the Archdiocese of Glasgow during the production of Gillespie, Kidd & Coia's church designs.

The status of Archbishopric was conferred on the Glasgow by Pope Alexander VI in the fifteenth century. Consequently, through the medieval period, religious life was led by Catholic bishops. However, as with much of the rest of the country, Glasgow subsequently succumbed to the intolerance of the Reformation in 1560, when the Archbishop of Glasgow fled the city.[192] During the ensuing centuries, the shock on society resulting from the Union with the England in 1707, brought both resentment and economic advantages as a result of augmented trade and industrialisation. The polarisation in the financial status of the population that this generated is comparable to other sizeable UK cities, but in Glasgow the contrast was particularly intense, with the genteel villas of the wealthy in close proximity to some of the worst slum-housing in Europe. The economic state of the city is connected to both migration and religion, as the majority of the Irish immigrants were both impoverished and Catholic, and so generally found themselves occupying the worst of the city's housing. So with a significant Irish Catholic population, during the nineteenth and twentieth centuries, the socio-religious fabric of Glasgow was once again interwoven with a significant Catholic population.[193] A large increase in the Roman Catholic population in Scotland occurred from a small and very dissipated Catholic population in Western Scotland in the mid-eighteenth century to some 75,000 in Glasgow alone by 1864. This was caused in part by migration to industrial Clydeside by people

[192] Audrey, S. (2000) Multiculturalism in Practice: Irish, Jewish, Italian and Pakistani migration to Scotland. Aldershot: Ashgate Publishing Company, p. 13

[193] The link between Lowland Scotland and Ulster is historic, and is apparent in their geography (at their closest point, Scotland and Ireland are only twelve miles apart) through religion – from the Gaelic Scots who travelled from Ireland to Scotland in the fifth and sixth centuries, imparting not only their language but also their Christian religion, and through the complex politics associated with this proximity.

from the Highlands of Scotland after the infamous Clearances of the eighteenth and nineteenth centuries, and Irish immigration particularly due to famine in the late 1840s.[194] The Catholic population of Glasgow was, consequently, overwhelmingly working-class, and in the face of hostility from the Presbyterian church, and by the construct of human nature, Glaswegian Catholics formed a distinct community within the city, relying heavily on the church as the focus of not just a religious, but also a cultural and ethnic identity.[195] Sectarian attitudes within the Protestant community meant that an official hierarchy involving the Catholic Church was not restored until 1878, when the Archdiocese of Glasgow was re-established under its pre-Reformation name.[196]This was also an impoverished ecclesiastical community, with its priests almost certainly the lowest paid in Scotland. Despite this, the Catholic Church in Scotland put great emphasis on its pastoral duties, whereas a notable lack of funds prevented the majority of its church-building from taking place until after 1850.[197] The period from about 1850 to the early twentieth century was very significant architecturally for Scotland as a whole, but particularly for Glasgow. This was particularly so for ecclesiastical architecture, where many new churches of all denominations had begun to be built, following the Disruption in the Established Church in 1843. The significance for the Catholic Church was even greater, following the restoration of the Hierarchy.

Another very significant contribution to the socio-religious make-up of Glasgow was the migration of Italians to the UK. The particularly significant phenomenon of a strong Italian presence in Glasgow can still be seen today, in the array of cafes and other gastronomic establishments present in the city. Indeed, there had been an Italian presence in Scotland since the eighteenth century; Suzanne Audrey comments on this in her book, *Multiculturalism in Practice*, as a class of immigrants who were largely educated, skilled,

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[194] MacMillan, F. (1948) 'The church in Scotland: Retrospect and prospect.' *The Tablet.* [Online] 27th March 1948 [Accessed 27th May 2017]

http://archive.thetablet.co.uk/issue/27th-march-1948/5/17641#scanned

[195] Audrey, S. (2000) Multiculturalism in Practice: Irish, Jewish, Italian and Pakistani migration to Scotland. Aldershot: Ashgate Publishing Company, p.32

[196] MacMillan, F. (1948) 'The church in Scotland: Retrospect and prospect.' *The Tablet.* [Online] 27th March 1948 [Accessed 27th May 2017]

http://archive.thetablet.co.uk/issue/27th-march-1948/5/17641#scanned

[197] Audrey, S. (2000) Multiculturalism in Practice: Irish, Jewish, Italian and Pakistani migration to Scotland. Aldershot: Ashgate Publishing Company, p.32-33.

artistic and respected.[198] But in the latter half of the nineteenth century, large numbers of unskilled migrants from Italy arrived in Glasgow – many of whom subsequently settled in the city – though many retained their cultural identity and were generally accepted more readily than the Irish were; their respective migrations to a large degree happening concurrently. The reasons for large scale movement of Italians to the UK and to Glasgow in particular, affected a largely rural population, and occurred through poverty engendered by a wholly unsustainable traditional 'sharecropping' form of agriculture, where successive generations of farmers inherited less and less land from their families. When farms could no longer function effectively, one way of ensuring survival was for sons of farmers to join peripatetic groups of pedlars who crafted plaster figurines to sell as they travelled across Europe. Some of these Italians travelled as far as England, and then on to Scotland, where other migrants had already begun to settle in Glasgow and other towns. Famous examples include the current Archbishop of Glasgow, Philip Tartaglia, and also his predecessor, Mario Conti.

The Roman Catholic Church in Glasgow began to have more funds to build churches, whereas previously, their finances had dictated that their work should focus on the pastoral administration of the Catholic doctrine to the faithful. In the second half of the nineteenth century, a great number of churches were built in the city and its environs. One of the most significant architects employed was the firm of Pugin and Pugin, who were also known for the creation of a great number of Gothic and Romanesque churches in England. This design approach was adopted in Glasgow for a local Catholic community of mixed geographical backgrounds (and potentially strengthened by the appointment in 1869 of a 'neutral' English Archbishop, Charles Eyre, to the Archdiocese of Glasgow).[199] It is also significant in the stock foundation for much of the subsequent Catholic Church architecture of the twentieth century – including Scotland; and when the Catholic Church was able to build churches, it has ever been cognizant of the need to provide new churches in new parishes, expanding conurbations and new housing schemes.[200] As early as the late nineteenth century, at the time of the restoration of the Hierarchy in Glasgow, the future need for suffragan sees to cope with an increasing Catholic population in the

[198] Audrey, S. (2000) Multiculturalism in Practice: Irish, Jewish, Italian and Pakistani migration to Scotland. Aldershot: Ashgate Publishing Company, p. 33.

[199] Ibid. p.33

[200] Ibid. p.33

Glasgow area was predicted in an Apostolic Letter, *Ex Supremo Apostolatus Apice.*[201] A solution to the issue would eventually bear fruit in the post-Second World War period, which would also become connected to the exigencies of town planning.
During the latter part of the nineteenth century, experiments abounded in the use of ecclesiastical Gothic, inspired largely by the Scots' English counterparts (and the romantic novels of literary Scottish figures such as Walter Scott). However, it wasn't until the closing decades of the nineteenth century, with the arrival of the Ecclesiological Society in Glasgow that more scholarly examples of Gothic arrived in religious architecture. There were many cases where Gothic was used, in various denominations. For example, the Presbyterian Church tried to reconcile the traditional hall-like preaching box churches with a more contemporary archaeological Gothic. In terms of the Catholic Church in Glasgow, one of the first examples of French Gothic was St. Mungo's, Townhead, designed by George Goldie in 1866-69,[202] which has a High Altar designed by Gillespie, Kidd & Coia (1952).[203] Then, under the aegis of Archbishop Charles Eyre (1878-1902) the firm of Pugin and Pugin was frequently employed by the Archdiocese to carry out the design of new churches. This church-building programme was generally in the Decorated Gothic style, 'with ugly rock-faced finishes and pinnacled marble altars'.[204] These include such examples as St. Francis, Gorbals (1878-95), St. Bridget, Baillieston (1891-93), St. Agnes, Lambhill (1893-94), St. Patrick, North Street (1898), and St. Alphonsus, London Road (1905).

However, Gothic was not the only historicist style experimented with by the Archdiocese of Glasgow at the end of the nineteenth century and in the first decades of the twentieth century. They had commissioned new churches also in Italianate styles, of which some notable examples include Goldie and Child's St. Mary's, Abercromby Street, Calton (1841-42). In its High Renaissance form it occurred at Ménart's St. Aloysius, Garnethill (1908-10), and at Sacred Heart, Bridgeton (1900-10), with a distinct Roman aesthetic, the

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[201] MacMillan, F. (1948) 'The church in Scotland: Retrospect and prospect.' *The Tablet.* [Online] 27th March 1948 [Accessed 27th May 2017]

http://archive.thetablet.co.uk/issue/27th-march-1948/5/17641#scanned

[202]Williamson, E. (1990) 'Introduction.' *In* Williamson, E., Riches, A., and Higgs, M. (eds.) (1990),The Buildings of Scotland: Glasgow. London: Penguin Books. p. 60.

[203] Scotland's Churches Trust. (no date) *St Mungo's Church, Townhead, Glasgow.* [Online] [Accessed 11th June 2017] https://www.scotlandschurchestrust.org.uk/church/st-mungos-church-townhead-glasgow

[204] Williamson, E. (1990) 'Introduction.' *In* Williamson, E., Riches, A., and Higgs, M. (eds.) (1990),The Buildings of Scotland: Glasgow. London: Penguin Books. p.60.

church at which Gillespie, Kidd & Coia carried out alterations to during the late 1940s. Honeyman's St. Anthony, Govan (1877-79), is described to be designed in a North Italian Romanesque externally, with Renaissance detailing internally.[205] Even Pugin and Pugin departed from their usual Gothic preference with an Early Christian example at Holy Cross, Govanhill (1909-11).

Fig. 5 Roman Catholic Church of St. Bridget, Baillieston (1891-3), Pugin & Pugin

[205] Ibid. Pp. 60-1.

Fig. 6 Roman Catholic Church of St. Agnes, Lambhill (1893-4), Pugin & Pugin

Fig 7. RC Church of St. Aloysius, Garnethill (1893-4), Pugin & Pugin

The Catholic Church had also continued to exchange ideas with Catholics in continental Europe, through such institutions as the Scots colleges in Rome and Paris. In the period leading up to the Great War, Scots had begun to make pilgrimages to Rome in a way that had never before been possible. This was due to the building of railways, making the spiritual attractions of the churches and shrines of the Eternal City newly attainable and able to be experienced; including those built both before and during the papacy of Pius XI, and the Scots College itself. This was probably the first time that Rome had become a reality to members of the general population, and these monuments, studded into the intoxicating matrix of the city, must have been overwhelmingly powerful. McCluskey writes of the impression that many of the iconic emblems of Catholicism imparted, demonstrated in the important centres of Catholic cults such as St Francis at Assissi, St. Benedict at Subiaco, and Our Lady of Good Counsel at Genazzano, expressed against the evocative context of the Italian countryside of Tuscany and Umbria.[206] The year 1910 had witnessed the first Scottish National pilgrimage to Lourdes,[207] and in the Holy Year 1925, pilgrimages to Italy reached a peak, as remarked upon in *The Tablet*, with estimates of around one million British Catholics having visited Rome during that year.[208] Less than fifty years since Scotland's Catholic hierarchy was restored, and with a national college for the training of priests in Rome itself, Scotland would have been aware of the attractions for pilgrims. Pilgrims would have seen and experienced churches in the place that was the universal seat of their faith. Because of this, and because of the religious discretion required back in Scotland, a shared bond was created, and a sense of communal identity emerged: one could be at the same time, Scottish, Roman and Italian, at least in spirit.[209]

Following the First World War, the patronage of churches diversified. Within the context of ecclesiastical architecture in Glasgow immediately prior to and during the first decade of Gillespie, Kidd & Coia's work, a number of characteristics occur interdenominationally. In the period immediately preceding the start of the firm's first church-building phase, there existed a preoccupation with 'style', with a reliance on Gothic styling which, for the Archdiocese of Glasgow, provided a familiar ecclesiastical vocabulary. At this point, architectural features would not necessarily be used in an integral or experimental way, as

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[206] McCluskey, R. (Ed.) (2000). *The Scots College Rome 1600-2000.* Edinburgh: John Donald, p. 98.

[207] Williamson, C. (2016) *The history of Catholic intellectual life in Scotland, 1918-1965.* Bath: Palgrave Macmillan, p. 2.

[208] Anon. (1925) '1925: A catholic summary.' The Tablet. [Online] 26th December. [Accessed 2nd May 2015]

[209] McCluskey, R. (Ed.) (2000). *The Scots College Rome 1600-2000.* Edinburgh: John Donald, p. 98.

Gillespie, Kidd & Coia would demonstrate in the exposed, pointed reinforced concrete structural frames at St. Columba's, Glasgow and later at St. Laurence's, Greenock.

Within Glasgow, throughout the 1920s, the predominant mode of architectural expression had favoured the pointed arch and associated stylistic expression in a more or less simplified way. Prominent Glaswegian examples of Gothic-styled churches existed in a range of buildings and in differing denominations. For example, Sir John Burnet's multifaith War Memorial Chapel at the University of Glasgow (1923-7) employs the style to harmonise with its context, George Gilbert Scott's University buildings. However, unlike Gillespie, Kidd & Coia's St. Columba's and St. Laurence's, Burnet masks his modern concrete frame.

Elsewhere, architects employed by the Church of Scotland suppressed superfluous detail in their commission for St. John Renfield (James Taylor Thomson, 1929-30), and designed pointed arched fenestration at Keppie & Henderson's St. Enoch, Hogganfield. The Baptist Church also engaged architects exploiting a simplified form of Gothic, exemplified in the Perpendicular Gothic windows of Miller & Black's Partick Baptist Church of 1927.

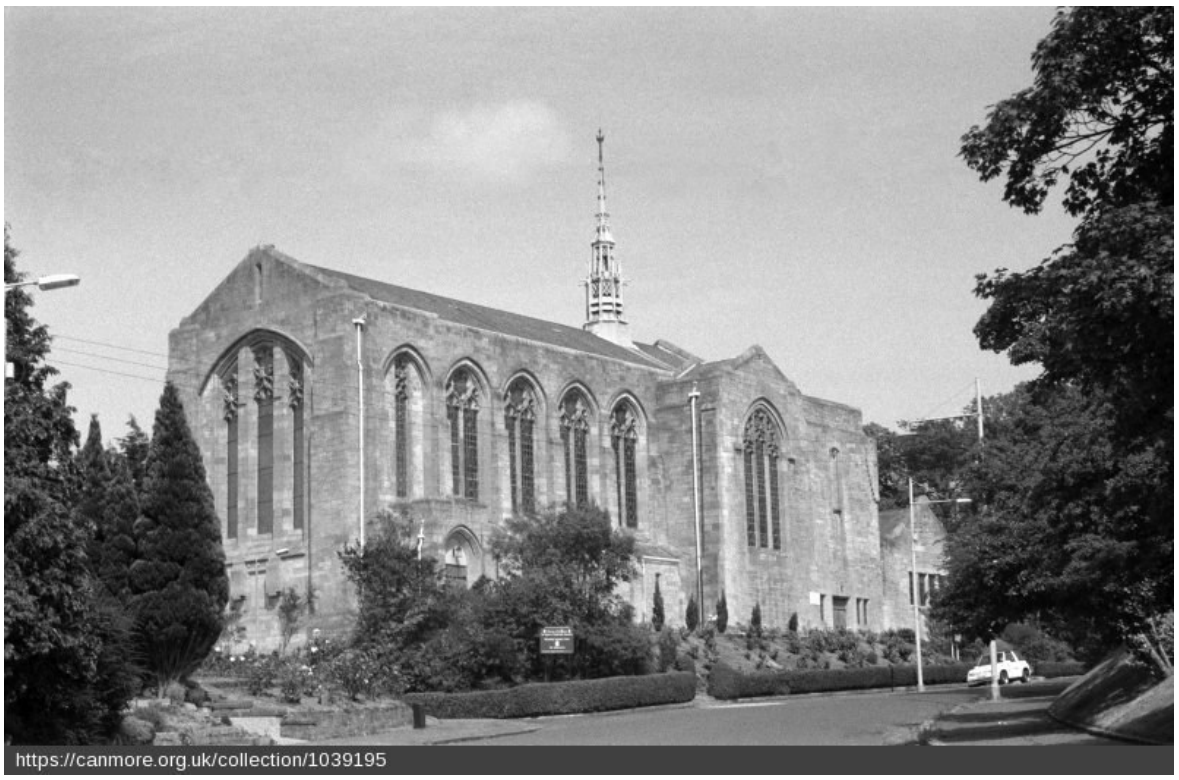

Fig. 8 St. John Renfield (1929-30), James Taylor Thomson

Leslie Grahame Thomson (1896-1974) was a prominent Protestant church architect during the interwar period, and a great proponent of Scottish Traditionalism during this time. Famed for his vitriolic views on continental, flat- roofed, 'rabbit-hutch'[210] Modernist architecture, Thomson believed in the virtues of a more nationally symbolic treatment of ecclesiastical architecture, be it Catholic or Protestant. He had previously been articled to Sir Robert Lorimer, the influence of whom was initially evident in his early work. It is reputed that Thomson, having travelled widely to Italy, France, Holland, Switzerland, Belgium, Norway, Greece, the Middle East and North Africa, subsequently explored other architectural themes, being particularly fascinated by 'white- walled' American-Italian style, 'Cape-Dutch' elements, similar to those used by Oldrieve, Bell and Paterson (Thomson having been a personal friend of Paterson) and latterly Scandinavian influences.[211] Thomson is famed particularly for his work on the design of the Reid Memorial Church of Scotland, Edinburgh (1929-33), exactly contemporary with Gillespie, Kidd & Coia's St. Anne's, Dennistoun. Not only was it one of the largest interwar churches to have been built in Scotland, but it was also one of the last to be built in stone. Occupying a prominent position at the intersection of West Savile Road and Blackford Avenue, it is composed in a dramatic Arts and Crafts version of Gothic. This is significant as this came at a time when Coia was deliberately trying to move away from both sandstone and Gothic, as illustrated in his views on 'transitional' church architecture.[212] The view that the Catholic Church was aware of its duty to support the arts may explain the explorative nature of certain Catholic churches such as St. Anne's, compared with the Presbyterian concept of plainness and simplicity, which would be developed by the Church of Scotland as the Modern Movement progressed.

Within the Catholic Church, Reginald Fairlie (1883-1952), from an old, Ayrshire family of Roman Catholic gentry, was probably the most prolific Catholic architect of the first half of the twentieth century and epitomised the Traditionalist notion of adopting a simplified, 'national' aesthetic, often with a broadly Romanesque character. His designs were unique yet very recognisably traditional. That he belonged to and maintained a tradition at a time of transition adds to the tension surrounding Gillespie, Kidd & Coia's first body of

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[210] Watters, D. (1997) *Cardross Seminary Gillespie, Kidd & Coia and the architecture of postwar Catholicism.* Edinburgh: RCAHMS, p.13.

[211] Dictionary of Scottish Architects 1840-1940 (2014) *Leslie Grahame Thomson* [Online] [Accessed 2nd May 2015] http://www.scottisharchitects.org.uk/architect_full.php?id=200832

[212] Coia, J. (1969) 'Royal Gold Medal address.' *Building,* 27th June.

ecclesiastical work. Where Gillespie, Kidd & Coia's work developed dramatically over the decades, Fairlie's work represents a consistency of design within a traditional pedigree. Like Leslie Grahame Thomson, Fairlie was trained in the office of Sir Robert Lorimer before establishing his own practice in Edinburgh in 1909. Again, like Thomson and Coia, Fairlie travelled in Europe on study trips, taking a particular interest in France and Italy, and to Norway and Sweden with his former apprentice, Ian Lindsay.

It is perhaps unsurprising that Fairlie, a staunch Catholic, usually designed along traditionalist lines, as the faith to which he belonged was very much integrated with its traditions. However, it has been said that he was part of a living tradition, and to which he constantly added.

Fairlie's Roman Catholic Church of the Immaculate Conception, Fort William is directly contemporary with Gillespie, Kidd & Coia's St. Anne's, but unlike St. Anne's, Fairlie's church is conceived in a heavy, though much simplified Scottish Romanesque style, replete with muscular tower and late Gothic-inspired tracery. The heaviness of this church contrasts to the crispness of Our Lady Star of the Sea, Tayport (1939), of white harled brick construction. It is tempting to speculate that Fairlie here may have been influenced, like Gillespie, Kidd & Coia, by the legacy of Mackintosh, though, unlike Gillespie, Kidd & Coia's experimentation with continental Modernism seen in the Roman Catholic Pavilion, Tayport remains very much rooted in the Scottish tradition.

Between these two beacons of traditionalism is Fairlie's 1937 Church of the Sacred Heart in Cowie, Stirlingshire. The unusual octagonal plan form is significant as it marks a departure, albeit short lived, from his preceding and subsequent churches. Constructed in red brick and set on a concrete raft foundation, the novel plan type would seem to be more experimental than Coia's churches of that period. In the same year, Cachemaille-Day designed St. Michael and All Angels in Wythenshawe, similar in its experimentation with centralisation, although more star-shaped in plan, and internationally, Daneri's parish church of St. Marcellino in Genoa, having a circular plan form.

Thomson and Fairlie were eastern Scottish 'traditionalists'.[213] What is striking about the work of these architects is that, with the exception of Fairlie's Cowie church, Gillespie, Kidd & Coia appear to be unique in their development and experimentation of church

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[213] Watters, D. (1997) *Cardross Seminary Gillespie, Kidd & Coia and the architecture of postwar Catholicism.* Edinburgh: RCAHMS, p.13.

designs. Even within the same timeframe the Roman Catholic Pavilion and St. Peter-in-Chains were designed in the midst of the early hybridised brick churches, not to mention groupings of significantly different churches in later decades.

Fig. 9 Our Lady Star of the Sea, Tayport (1939), Reginald Fairlie

In the immediate context of Gillespie, Kidd & Coia, the dual contexts of Rome and Glasgow came together under the auspices of Donald A. Mackintosh (1876-1943), who has often been described as the starting point of Gillespie, Kidd & Coia's long relationship with the Roman Catholic Church. Having studied for the priesthood at St. Mary's College, Blairs and the Institut Catholique in Paris, he left a deep impression on the Roman Catholic community in both Rome and Glasgow, having further studied at the Scots College, Rome, where he subsequently became Rector from 1913-22. Mackintosh was then appointed Archbishop of Glasgow – an appointment bestowed on him just three months after the election of Pius XI as Pope in February 1922, making him one of the new pope's first clerical appointments.

Mackintosh, described as a 'zealous watchdog over Catholic Interests' by the *Catholic Observer* in 1930 (cited in Williamson[214]) acceded to the archbishopric - the largest

[214] Williamson, C. (2016) *The history of Catholic intellectual life in Scotland, 1918-1965.* Bath: Palgrave Macmillan, p. 55.

Archdiocese in Scotland with 'three-quarters of Scotland's Catholics'[215] - near to the beginning of a concerted effort to renew a Catholic presence in Glasgow in the aftermath of war.[216] The new Archbishop was viewed as a 'safe pair of hands'[217], as not only had he navigated the Scots College through the tribulations of the First World War, but in Glasgow he adroitly dealt with the failing finances of the Archdiocese. This reference could hardly have been more apt, but Mackintosh's obituary in the *Glasgow Herald* describes a man whose spirit lay in Rome and the guardianship of the Scots College. Despite this, the apparent confidence placed in him by the Pope in undertaking such a commission did not go unremarked by the Glasgow Press, writing that 'Never was Nolo episcopari said with greater pain and sincerity; but the appointment was a command.'[218] Furthermore, Glasgow was a particularly sensitive Archbishopric to fill, given the problem that the city had been said to have encountered with communism in the General Strike of 1926. The new Archbishop was able to set to work on reinforcing spiritual borders by building new churches and thereby reinforcing the Catholic presence in Glasgow in light of the unrest that surrounded 'Red Clydeside'.

In his capacity as Archbishop, Mackintosh was also president of The Catholic Union of the Archdiocese of Glasgow (CUAG), which was initiated in 1885 following the re-establishment of its Hierarchy. Its primary objective was to safeguard and promote Catholic interests within the Archdiocese, with involvement in the political, social and cultural spheres of Glasgow and its surrounding areas. At that time, the Archdiocese covered a very large geographical area, and supported a poor and dispersed population. The CUAG's focus was on Glasgow itself and on developing the impact of the Archdiocese within its new metropolitan setting. The Union also possessed a more diplomatic function in the multilateral representation of its members; important in quelling any perceived hierarchical inequalities between the laity, a large proportion of whom had an Irish background, and a mainly Scottish clergy.

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[215] Gallagher, T. (1987).Glasgow the uneasy peace. Manchester: Manchester University Press, p.229.

[216] Williamson, C. (2016) *The history of Catholic intellectual life in Scotland, 1918-1965.* Bath: Palgrave Macmillan, p. 1.

[217] McCluskey, R. (2000) 'Tribulations 1820-1922.' In McCluskey, R. (Ed.) The Scots College Rome 1600-2000. Edinburgh: John Donald., pp.67-107.

[218] Anon. (1943) 'Obituary: Archbishop of Glasgow: Most Rev.Donald Mackintosh, DD.' *The Glasgow Herald.* [Online] 9th December. [Accessed 2nd May 2015]

Prior to the Archdiocese's surge of church-building, in the 1920s, it had focused on more immediate issues of education and welfare, before these were subsumed under municipal control following the 1929 Local Government (Scotland) Act. However, the early 1930s witnessed renewed vigour in the Vatican-led movement of *Catholic Action*, with a focus on the involvement of the laity on social areas of pastoral care. This manifested itself as Pius XI's *Quadragesimo Anno* (1931),[219] published forty years after – and to some extent reiterating some of the same concerns[220] of Leo XIII's earlier pastoral encyclical, *Rerum Novarum.* [221] This dealt with the dangers of economic liberalism,[222] and Pius XI's work was written within a climate of growing nervousness within the Catholic Church on the perceived threat of communism.

Locally, an increase in anti-Catholic groups, combined with the alienating effects of the Local Government Act on the Archdiocese's control of Church-led mediation between Catholics and local authorities in Poor Law and Education, had called into question the purpose of the CUAG. This led to action being taken by Mackintosh, who engineered the collaboration of a number of different bodies involved in Catholic Action, to imbue CUAG with a renewed sense of direction. The Glasgow Catholic Federation (GCF) was the result, but it proved to be a relatively fleeting endeavour, given that Mackintosh then reneged on the idea of continuing an organisation that he felt was at risk of duplicating the work of the CUAG. By 1932, the CUAG proceeded with fresh purpose, in tandem with its Advisory Bureaux, the CUAB,[223] established in 1931 in place of the aborted GCF. Through this, primarily implemented to oppose the apparent risk of communism to the Catholic community, the Archdiocese became involved in one of the most concentrated attempts to administer Catholic social action in the UK.

If the social action demonstrated by the Glaswegian Catholic intelligentsia showed moral vigour, then the programme of church-building coinciding with *Quadragesimo Anno* and the actions of the CUAB was a manifestation of its practical provision. The relationship of Gillespie, Kidd & Coia to the Archdiocese of Glasgow begins simultaneously, in Coia's well-known approach to the Archbishop in 1931. The longevity of Gillespie, Kidd & Coia

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[219] Translated as *In the fortieth year*

[220] Catholic Social Teaching (no date) *History* [Online] [Accessed on 23rd June 2017] http://www.catholicsocialteaching.org.uk/principles/history/

[221] Vatican (no date) *Quadragesimo anno* [Online] [Accessed on 12th June 2017] http://w2.vatican.va/content/pius-xi/en/encyclicals/documents/hf_p-xi_enc_19310515_quadragesimo-anno.html. *Rerum Novarum t*ranslated as *On the Condition of Workers.*

[222] Williamson, C. (2016) *The history of Catholic intellectual life in Scotland, 1918-1965.* Bath: Palgrave Macmillan, p. 40-1.

[223] Catholic Union of the Archdiocese of Glasgow Advisory Bureaux

has been established; but, in support of the core aim of this study, it is compelling to question the status and quality of their success as a practice. Indeed there were other Scottish architectural firms who were secured the patronage of the Catholic Church, such as Thomas Cordiner and Reginald Fairlie, but their work is rarely discussed in the same terms.

One of the factors that invites discussion and notability is the density of Gillespie, Kidd and Coia churches in the Glasgow region. An increasing number of Roman Catholics in the region elucidates a need for places of worship for that particular denomination; but this does not explain why Gillespie, Kidd & Coia were so significant in shaping the outward-facing expression of that community – its churches.

A recognition of the need to express a common identity in the midst of an extant socio-religious culture, appears to link both Jack Coia himself and the general Catholic population in the Greater Glasgow area, but even this may not be entirely accurate. Jacqueline Coia asserts that her father felt more Glaswegian than Italian,[224] but it is perhaps the external perception of Coia as Italian, particularly by the Archdiocese of Glasgow, and the expectation of a sense of inherited culture, that was so helpful to the success of his practice via its continued patronage. In the Archdiocese's appointment of Coia, as an architect with direct Italian heritage, and especially as a Glaswegian-Italian, an academic and practitioner, he could be seen to have been a trusted appointment to the task of church building. In reviewing the practice's church-building projects, there is much information relating to the build process of the first church; St. Anne's, Dennistoun (1931-33) in correspondence between Gillespie, Kidd & Coia, the Archdiocese of Glasgow and the various contractors and agencies involved in its design and construction. This is perhaps not surprising, since it was Coia's inaugural building.

After the St. Anne's commission, the firm's relationship with the Archdiocese survived the adversity of the Second World War and the tenure of two further Archbishops. Although after the Second World War, the CUAG lost impetus due to a welfare state with a very broad remit, whereby Catholics required far less pastoral care from the clergy,[225] the need to build churches intensified. This could be said to be attributed both to the upsurge in piety in the immediate post-war period, and also in response to the vast, new housing estates and new towns that began to be planned and built in central Scotland, particularly in the environs of Glasgow.

[224] In conversation with Jacqueline Coia, January 2007.

[225] Williamson, C. (2016) *The history of Catholic intellectual life in Scotland, 1918-1965.* Bath: Palgrave Macmillan, p. 56.

Archbishop Mackintosh's successor, Donald A. Campbell (1894-1963) coincides with this period. Like Mackintosh, Campbell was educated at Blairs and in Rome, where he was ordained in 1920.[226] Of his character, we are told that he was 'friendly and unpretentious but lacking in depth'[227], but perhaps because of this was open-minded enough to overcome doubts that engrossed other senior members of the church about 'lay initiatives'.[228] In this regard, during the 1940s, Campbell lent his authority to such initiatives as those begun by the Catholic Workers Guild to clamp down on communist infiltration of the city, allowing the diocesan offices to be used for the Guild's meetings. The Glasgow Circle of the Newman Association, who described its role as 'spearhead of the intellectual apostolate', and representative of the laity prior to and in the immediate wake of the Second Vatican Council, [229]succeeded the CUAG as the main vehicle for *Catholic Action* in 1945, the same year that Campbell became Archbishop. It was an organisation to which the Archbishop lent his firm support, declaring that 'the more your association grows, the happier I shall be.'[230] Further to this, in 1948, the Archdiocesan Council of Social Action was established with the objective of implementing catholic philosophy to 'all spheres of social activity', including the provision of training for Christian Leadership in social action, and attempting to improve social conditions through catholic organisations.[231] These good intentions were short-lived though, with the council running out of steam very early on, due to changes of staff in key positions, and to the appointment of a new Vicar General, James Ward, in 1948. Ward worked closely with Campbell, and according to Gallagher, much of the subsequent reorganisation of the archdiocese, which included the building of forty-one new churches in as many parishes, and thirteen new churches in existing parishes, can be attributed to him rather than Campbell, but as Archbishop, Campbell was credited with the endeavour. As a traditionalist, Ward was noted to have shown little interest in the social action planned at the end of the 1940s, supported by Campbell, and as such, Gallagher asserts that by the

[226]Anon. (1945) 'Mgr. Campbell Glasgow's new archbishop.' *Catholic Herald*. [Online] 19th January. [Accessed 2nd June 2013].

[227] Gallagher, T. (1987).Glasgow the uneasy peace. Manchester: Manchester University Press, p.229.

[228] Ibid., p.229.

[229] Williamson, C. (2016) *The history of Catholic intellectual life in Scotland, 1918-1965.* Bath: Palgrave Macmillan, p. 145
[230] Williamson, C. (2016) *The history of Catholic intellectual life in Scotland, 1918-1965.* Bath: Palgrave Macmillan, p. 150
[231] Gallagher, T. (1987).Glasgow the uneasy peace. Manchester: Manchester University Press, p.229 .

mid-1950s, due to the influence of Ward, Campbell found himself out of touch with both the senior clergy and the laity[232].

Campbell was Archbishop of Glasgow during the most intensely active church- building period that Gillespie, Kidd & Coia engaged in for around a decade in the 1950s. If the claim made by the parish of Roy Bridge in Campbell's Lochaber home is any measure of his enthusiasm, even if he was not wholly responsible, it is unsurprising that, after the war, Gillespie, Kidd & Coia were welcomed back as the Archdiocese's principal architect:

not only did he build churches, some of them the most beautiful modern church buildings in the land, but he also delighted in consecrating them to the greater honour and glory of God'[233]

Under Campbell's leadership, not only did the patronage of new parish churches accelerate, but in 1947, the Archdiocese of Glasgow had also enacted the measures anticipated the previous century involving the practical management of the territory of the Archdiocese of Glasgow. This was achieved by splitting it into two further Suffragan Sees through the Apostolic Constitution *Maxime Interest*; the Dioceses of Motherwell, covering churches lying in Lanarkshire, outside the newly defined boundaries of the Archdiocese of Glasgow, and Paisley, covering churches in Renfrewshire. St. Peter-in-Chains, Ardrossan, which was previously within the demise of the Archdiocese of Glasgow, moved to the pre-existing Diocese of Galloway. Historically, the significance of this administrative action cannot be underestimated. Not only was this the first such occurrence of the installation of new Sees in Scotland since the creation of the Bishopric of Argyll in c.1200, but, as Frank MacMillan asserts in a 1948 edition of *The Tablet,* the move fundamentally distinguished the modern church from the pre-Reformation Church. The names, 'Motherwell' and 'Paisley', were completely new, and spoke of a new concentration of Catholics in the West.[234]

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[232] Gallagher, T. (1987).*Glasgow the uneasy peace*. Manchester: Manchester University Press., p.230.

[233] Roy Bridge Parish website (2012) *The Bulletin: St. Margaret's, St. Joseph's, St. Finnan's: notices 2*. [Online] [Accessed 10th April 2015]
http://www.gaeldom.com/bulletin/2012/July22/page6.htm

[234] MacMillan, F. (1948) 'The church in Scotland: Retrospect and prospect.' *The Tablet.* [Online] 27th March 1948 [Accessed 27th May 2017]

http://archive.thetablet.co.uk/issue/27th-march-1948/5/17641#scanned

The new Suffragan Sees led to an increased patronage network, necessitating re-ordering work to ecclesiastical buildings in addition to new parish churches. For example, in 1948, Gillespie, Kidd & Coia were engaged in the renovation of the Church of Our Lady of Good Aid to act as the cathedral for the new Diocese of Motherwell,[235] and oversaw artwork at the Bishop of Paisley's Oratory in 1955.[236]

Edward Douglas (1901-67), Motherwell's first Bishop (1948-55) was, like Coia, a student at St. Aloysius College prior to training for the priesthood at Blairs. He was then ordained by Donald Mackintosh in 1924. A tacit connection with Coia existed beyond that of Mackintosh during the 1930s, and when the Diocese of Motherwell was created, fourteen new parishes and associated churches were built there, a number of them by Gillespie, Kidd & Coia during their most prolific church-building phase. This was part of a wider programme of renovations, alterations and additions to a host of churches in the Glasgow area, using the services of Gillespie, Kidd & Coia, including one in the Archdiocese of Glasgow, St. Bonaventure's, Gorbals (1953), which had previously functioned as a factory.[237]

The Newman Association was instrumental in increasing the number of Catholic chaplaincies in Scotland.[238] In Glasgow, through its 'special objective' of the '[promotion of] knowledge and application of Christian principles as taught by the Catholic church'[239] it provided a further opportunity to use Gillespie, Kidd & Coia's ecclesiastical expertise, for their student work at the Catholic Chaplaincy at Turnbull Hall, at the University of Glasgow (1955). At around the same time, the practice was appointed to convert a small number of existing secular spaces into oratories, such as that of the Archbishop of Glasgow's House at 19, Park Circus (1948-55); a space created from a former operating theatre, and the oratory created from a former conservatory at the Jesuits' Retreat House at Craighead, Bothwell (1956).

James D. Scanlan (1899-1976) was the third appointment to the Glasgow Archbishopric to coincide with the unfolding oeuvre of Gillespie, Kidd & Coia. Scanlan was a second cousin to the previous archbishop, but Glaswegian, beginning his education at St. Mungo's Academy, and continuing on to St. Aloysius College. Scanlan and Coia were

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[235] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p. 47.

[236] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p. 117.

[237] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p.44.

[238] Williamson, C. (2016) *The history of Catholic intellectual life in Scotland, 1918-1965.* Bath: Palgrave Macmillan, p. 156.

[239] Williamson, C. (2016) *The history of Catholic intellectual life in Scotland, 1918-1965.* Bath: Palgrave Macmillan, p. 153.

almost direct contemporaries, both of a similar age and both having studied at St. Aloysius College. It is not outside the bounds of possibility that they may have met whilst students at the college and would certainly have shared a common early educational experience. An article from the Parish of St. Augustine, Coatbridge, in the Diocese of Motherwell, recalls how Scanlan, while still a student at the college, on numerous occasions visited an acquaintance then training for the priesthood at St. Peter's College, Bearsden. His acquaintance, James Black, would later become the Bishop of Paisley, so it is likely that a seed may have been sown for his future career from a relatively early age.[240] His priestly formation saw him embark upon a further course of study at St. Edmund's College, Ware, followed by training in France at the Institut Catholique in Paris, and then the Apollinare in Rome. Whether there existed any concrete connection to a later working relationship between Scanlan and Coia is unclear, though Jacqueline Coia alludes to a very positive rapport between the two men. Of his involvement with the firm's post-1954 design work, Coia's presence seemed as strong as ever, as he 'practically lived with Archbishop Scanlan who gave him the commissions,[241] and after they were built, in contrast to the alternative account of Coia's personal religiosity given in Rodger's summary of the firm,[242] he *'then knelt and prayed in them'.*[243]

Conclusion

The subject of this section provides the context for discussion of Gillespie, Kidd & Coia's architecture, the topic of the next section. We have learned of the rapid development of the reinstated Archdiocese of Glasgow and its need to provide new churches for an expanding population. In connection to this, stylistic development of commissions by the Church, both Catholic and Protestant, in the period preceding Gillespie, Kidd & Coia's practice, provide a context for patronage of church commissions both nationally and in Glasgow. The patronage of Gillespie, Kidd & Coia themselves came in tandem with a theological desire to increase the Catholic Church's presence in Glasgow due to the

[240] Kane, M. (2013) *The bishops of Motherwell*. 15th May. The Parish of St. Augustine, Coatbridge website. [Online] [Accessed on 13th April 2015] http://saintaugustines.org.uk/2013/05/15/the-bishops-of-motherwell/

[241] Coia, J. No subject. Letter to Gordon Davis. No date. Source: Jacqueline Coia.

[242] Rodger, J. (2007) 'Towards the MacMillan and Metzstein years.' *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987*. Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City, p. 18.

[243] Coia, J. No subject. Letter to Gordon Davis. No date. Source: Jacqueline Coia.

Church's fear of the rise of secular ideologies in the city. Gillespie, Kidd & Coia can be thought of as an institution with a long-standing pedigree of work in the city, some of it, such as Lion Chambers, an early example of structural innovation. As the practice was newly named, Coia as lead practitioner, drew on his association with the School of Architecture to develop a practice defined by its numerous employees who subscribed to diverse architectural precedent and sources over its lifespan. Repeated collaborations with sculptors such as Benno Schotz, despite the Church's suspicions of him, was evidence of the spiritual value of artwork that was specifically created for new churches.

Part 2: Architecture

Fig. 10 St.Anne's, Dennistoun (1931-3), Gillespie, Kidd & Coia. (Eamonn Canniffe)

Fig. 11 St. Columba's, East Kilbride (1979),

Gillespie, Kidd & Coia

(Alex Gabrysch & Zena Moore)

2.1 Introduction

Glasgow Context

Materially, many of the Gothic styled churches leading up to that start of Gilespie, Kidd & Coia's practice, discussed in *1.2 Patronage Context,* continued an ecclesiastical tradition that had favoured the use of stone as a building material, although this was sometimes employed as a facing material to more modern construction methods. Other architects demonstrated different methods of execution and finish. Miller & Black at Partick employed red sandstone, dressed on the central front bay and as quoins on the front elevation, with roughcast blocks elsewhere. In other areas, Thomas, Sandilands & Macleod at Mosspark Parish Church (1925-29) designed a substantial edifice executed in red ashlar sandstone, whilst Anniesland Methodist Church and St. Enoch, Hogganfield were built of roughcast reddish sandstone. Even modestly scaled buildings such as Holy Trinity employed the material.

In volume and massing, a tendency for straightforward, rectilinear spaces prevailed, with some geometrical experimentation in the external expression of certain volumes. Spatially, the War Memorial Chapel has a tall single-space nave and shallow chancel, and tall cylindrical turrets demarcate the four corners of the principal volume. Mosspark Parish Church, on the other hand features a large nave, protected by a traditional pitched slate-covered roof; and side-aisles with lean–to roofs. The church employs a pentagonal form to elements such as the apse. Connecting to this thread of inquiry, another example existed in Anniesland Methodist Church, a small hall church which appeared single storey due to the simply pitched roof extending down to incorporate the projection of the building towards the road. It did, however, possess a double-height volume as the main liturgical space.

As the new decade approached, subtle changes in the language of architectural expression began to materialize in the design of certain churches. St. Margaret's, Knightswood (1929-32), by Lorimer & Matthew for the Church of Scotland, was designed and built on the cusp of Gillespie, Kidd & Coia's first church-building phase. St. Margaret's is a substantial, tall edifice constructed of rough-hewn Doddingston stone with a tall central, crow-stepped tower on the principal elevation. Behind is a simple rectangular nave. Fenestration is, for the most part now, as at St, Margaret's, in the form of tall, narrow round-headed windows. At the same church, a tall, narrow carved detail occupies

the centre of the tower, beginning as a corbel detail at the bottom, and continuing up to the round-headed belfry aperture. Echoes of this would later be found executed in brickwork at St. David's, Knightswood (A. Gardiner & Gardiner-McLean, 1938-39).

Frank F. Macdonald's Knightswood Congregational Church (1933),[244] on the other hand, built at the same time as Gillespie, Kidd & Coia's first church; St. Anne's, Dennistoun, and is quite at odds with St. Anne's. Although Frank Macdonald (1905-1985) undertook an apprenticeship with Charles Ménart from 1921-26, any stylistic influence seems minor. Ménart was, before Gillespie, Kidd & Coia, one of the few architects working in the Glasgow area who demonstrated an experimental approach with the massing and detailing of churches.

The 1930s saw, in addition to a move to round-headed or simple rectilinear openings, a general increase in the acceptance of brickwork, of varying shades and sometimes with contrasting mortar, in church design across numerous denominations. This was perhaps a sign of more contemporary relevance during a period of economic austerity, social and urban change, and progenitor of design language versatility, as Proctor notes[245]. Moreover, an increased experimentalism pervaded in the sectional manifestation of churches – both in elemental massing and in the exposing of internal structure, though most retained largely 'traditional' plan forms. A simplified form of detailing continued, as did the employment of certain vernacular details such as crow-steps and harling.

Several churches display a number of these characteristics, though there were still reversions to previous ecclesiastical expression as the decade progressed, such as Cathcart Congregational Church (1934), designed and built by Stellmacs Ltd.; a building recalling a Puginian aesthetic, replete with rustic red sandstone in the form of a simple oblong volume with pitched roof, lean-to side-aisles and symmetrical gable volumes that project out from either side of the main (east) front. Apertures are square-headed at ground level and pointed-arched above, and are mainly paired around the building, apart from at the large east window.

Towards the end of the decade, Balfour & Stewart designed Mosspark United Church (1937-38), for the United Reformed / Methodist Church; an interesting, though simple and austere building, mainly due to its envelope of light grey harling. Doorways, window

[244] Williamson, E., Riches, A., and Higgs, M. (eds.),The Buildings of Scotland: Glasgow. London: Penguin Books, p. 397.

[245] Proctor, R. (2014). *Building the modern church.* Farnham: Ashgate Publishing Limited, p.63.

surrounds and tracery are demarcated in contrasting red sandstone in a similar vein to United Free Church, Great Western Road of the previous year (Stellmacs Ltd.), a small chapel notable for its white render with red sandstone detailing to doors and windows. At Mosspark, this provides the only significant detail externally. A lack of detail due to the levelling effect of the harling, coupled with the relative simplicity of the church's geometric volumes, puts this building somewhere between a national vernacular and a tentative modernism. This is reinforced by the unusual triangular windows on the pentagonal apse, appended to the east end of the basically rectangular nave. However, none of these features are as modern as Gillespie, Kidd & Coia's Roman Catholic Pavilion at Bellahouston Park, just a stone's throw from the Mosspark Church and virtually contemporaneous with Balfour & Stewart's building. It has often been noted that the Roman Catholic Pavilion firmly acknowledged the Scottish Vernacular, in the manner of Mackintosh's harled buildings, such as Hill House; yet this would seem more aligned with a building such as Mosspark United Church – and Coia's smooth white render more suggestive of an interpretation of international modern.

Contemporary with Gillespie, Kidd & Coia's St. Peter in Chains and The Roman Catholic Pavilion was A. Gardiner and A. Gardiner-McLean's offering for the Church of Scotland; St. David's, Knightswood, of 1938-39. This was also constructed of brick externally with an exposed concrete frame internally. It featured a basilican layout with a central tower on the main elevation, surmounted with a steep recessed gabled, and is topped with a cross. It is particularly significant in its use of brick and concrete.

At the close of the decade, Stellmacs Ltd. designed Our Lady of Lourdes (1937-39) for the Roman Catholic Church. This church seems at first traditionally ecclesiastical, with lancet windows, an attached tower on the north-west corner, and stone dressings; yet it is simultaneously experimental; not so much with massing or internal planning, as with the material and plastic treatment of its elevations. Rustic brown brickwork replaces stone as the primary building material, with sharply delineated white pointing – both externally and internally.

By this time, Gillespie, Kidd & Coia had already contributed almost a decade's worth of work to the Roman Catholic Church in a series of buildings that were paradoxically extraordinary both in their consistency and in their variation. The mansarded brick volumes of St. Anne's (1931-33), St. Patrick's (1935), St. Columba's (1937) and St. Peter-in-Chains (1938) demonstrate a common underlying spatial language, but this is manipulated particularly in their internal expression; here celebrated, there concealed. The veiling of these structural bodies by slightly (or substantially) taller entrance volumes

adds to the sectional variation, as does the change in direction of roof section at St. Columbkille's, now simply pitched with a flat, coffered ceiling internally. The Roman Catholic Pavilion is the greatest variant, however, largely due to the employment of a different construction technique, but also a significant indicator of an awareness of an international modernity.

In reviewing the ecclesiastical design context of the period immediately preceding and that parallel to Gillespie, Kidd & Coia's first design phase, a range of tendencies in architectural expression have been identified; a large proportion of these relating to denominations other than the Roman Catholic Church. This has demonstrated a general tendency for certain trends such as a change in material use, general paring down of detailing pertaining to particular styles, and perhaps more importantly, though perhaps demonstrated most consistently through Gillespie, Kidd & Coia, inquiry in sectional expression.

Gillespie, Kidd & Coia

The churches of Gillespie, Kidd & Coia are scattered over the Glasgow metropolitan area and further afield. They can be interpreted as the typological output of the practice in which its ethos can most consistently be tracked and analysed in terms of its evolving response to outside factors.

More than any other, this building type has been associated with the firm since the inception of the practice, so provides an insight into evolving or long-standing design philosophies. As a building type it has also found itself within the combined forces of both architectural and liturgical change.

To advance this study each of the practice's parish churches were appraised and later analysed hierarchically through the criteria established at the beginning of this section. Of these themes, discussion of liturgy, by virtue of its social, functional and symbolic basis, acts as an umbrella to the other themes. The remaining themes are primarily concerned with architectural principles or techniques.

Liturgy, although fundamentally connected to all of the other themes, is concerned with the user's journey up to and through the building, as well as the specific spatial arrangements and more symbolic qualities such as the placement of sacred objects within the building, and ambient effects on the space. It is also an important factor in establishing

liturgical prescription at a given point. The rubrics of the Mass were constant, however. For example the Eucharistic rite, remained a focal point in both the traditional and new forms of the Roman Catholic liturgy, as did baptism.[246]

A study of building plan elucidates development or change in physical form, layout and programmatic intent. We can note in the early phase the continuation of somewhat traditional planning models, and from the 1950s, a more experimental and expressive approach in plan form.

Building cross-section is a basic requirement in the communication of an architectural idea, but Gillespie, Kidd & Coia's churches deal with this in a way that is more fundamental to the experience of their buildings, connecting it to context, scale and liturgical narrative. Connected to cross-section are the sub-themes of lighting and structure, as both are either necessary for the creation of, or are created by, the existence of the building's cross-section. Light, as a functional concern, is fundamental to one's perception of architectural space and to the architect's lexicon. In the context of ecclesiastical architecture, it is also symbolic, being in almost constant dialogue with a church's liturgical basis. Similarly, structure has a pragmatic aspect as it is reflective of both evolving construction methods and as a response to external parameters such as the economy (for example in the aftermath of the Second World War). It also adopts a phenomenological role when the tectonic aspect of the assembling of structural components is elevated to form a distinct architectural and spiritual experience.

Volume represents the three-dimensional extrusion of plan and cross-section and is animated by structure and light. On a wider scale it is linked to a building's setting and its tectonic arrangement and massing on a site.

Materials relates to construction methods, economic constraints and tectonic possibilities, but also concerns aesthetic value and referencing of design details from other sources, particularly when considered in terms of building envelope or internal finish.

The following is a chronological list of Gillespie, Kidd & Coia's work. In the subsequent discussion, however, they will be addressed not in chronological order but according to their particular characteristics.

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[246] Hammond was criticised for appearing to emphasise only the Eucharistic rite in *Liturgy and Architecture*. See Proctor, R. (2014). *Building the modern church.* Farnham: Ashgate Publishing Limited, p. 139.

St. Anne 1931-33
St. Patrick 1934-35
St. Columbkille 1934-40
St. Columba 1937-38
St. Peter-in-Chains 1938
Roman Catholic Pavilion 1938
Holy Family 1946-59
St Joseph 1947-50
Oratory, 19 Park Circus 1948-55
St. Eunan 1950
St. Matthew 1950
St. David 1950
St. Kevin 1947-50
St. Laurence 1951-4
St. Michael 1952-54
St. Andrew, Airdrie 1953
Ss. Peter and Paul 1953
Roman Catholic Chaplaincy, Turbull Hall, University of Glasgow 1955
St. Maria Goretti, Cranhill1955
St. Joachim, Carmyle 1956
St. Paul, Glenrothes 1956-57
St. Kessog, Balloch 1957
St. Paul the Apostle, Shettleston 1959
St. Vincent de Paul, Thornliebank1959
St. Charles Borromeo, Kelvinside 1959
St.Mary of the Angels, Camelon 1960-61
St. Martin, Castlemilk 1961
St. Mary, Borrowstouness 1962
St. Bride, East Kilbride 1963-64
St. Patrick, Kilsyth 1964
St. Joseph, Faifley 1964
Sacred Heart, Cumbernauld 1964
Our Lady of Good Counsel 1965
St. Benedict, Easterhouse 1965
St. Benedict, Drumchapel 1965-67
St. Margaret, Clydebank 1972
St. Columba, East Kilbride 1972

2.2 Liturgy

Fig. 12 Opening ceremony at St. Peter in Chains, Ardrossan,2nd October 1938
http://www.saintpeterinchains.net/

Rightly, then, the liturgy is considered as an exercise of the priestly office of Jesus Christ. In the liturgy, by means of signs perceptible to the senses, human sanctification is signified and brought about in ways proper to each of these signs; in the liturgy the whole public worship is performed by the Mystical Body of Jesus Christ, that is, by the Head and his members.

The liturgy was so defined in the Constitution *Sacrosanctum Concilium* on the Sacred Liturgy at the Second Vatican Council on December 4th, 1963, after many decades of scholarly attempts at its definition since the beginning of the Liturgical Movement. As Martimort explains, the task of summarising its meaning was notoriously difficult, due to its nature as a 'living' concept.[247]

[247] Martimort, A. (1983) 'Definitions and method.' *In* Martimort, A. (ed.), *The church at prayer, volume 1: principles of the liturgy.* Collegeville: The Liturgical Press, p. 11.

It can be thought of as a fundamentally community-based act, which is, by its nature, a physical, tangible process. As explained in the Introduction, it is characterised by gestures and actions, verbal and physical. The liturgy is therefore reflected in the body; in the human body via the actions of the gathered community within the church, [248] and the 'material church' (building) is a representation of the mystical body of Christ (represented by the assembled community of people),[249] or the *domus ecclesia*.[250]

The liturgy manifests itself according to its actions in the dimensional, directional, and volumetric arrangements of the spaces around it. Historically, the clarity of the relationship between space and function varied. In the Early Christian church, spatial organisation reflected the active nature of the liturgy most lucidly. Churches tended to consist of a simple, clearly defined space – often oblong in layout, and with a separate, clearly delineated sanctuary, frequently contained within an apse. The altar was the liturgical centre of the space and may have addressed a single hall-like space or a space with a room to each side as well, or transepts. There was a distinct relationship between celebrant and laity, with good lines of sight and audibility.

Medieval churches, to some extent, diluted the legibility of the early layouts, instead contriving space with excessive additions, particularly between the altar and the people, incorporating choirs, clergy and associated seating, and rood screens obscuring the altar, thereby weakening the central premise of the liturgy as a communal act of celebration.[251]

As a result of the Counter-Reformation (1545-63), Baroque churches attempted to regain liturgical clarity, the seeds for which could be said to have been sown with Vignola and della Porta's Jesuit Church of Il Gesu in Rome. The internal layout emphasised uninterrupted lines of vision and aural clarity due to the limitation of the transepts and curtailing of the nave.[252]

The reforms of the Second Vatican Council also advocated a re-establishment of traditional liturgical clarity, allowing a layout that would cater for the 'active participation' of the people gathered for worship. It also appealed for the sanctuary to be distinct from the congregation, and to contain the altar, as the focus of the Eucharistic rite, and celebrant's

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[248] Ibid., p. 178-9.
[249] Davis, C. (1962) 'Church architecture and the liturgy.' *In* Hammond, P. (ed.) *Towards a Church Architecture*. London: The Architectural Press, p.115.
[250] Literally, *house church*
[251] Martimort, A. (1983) 'Liturgical signs.' *In* Martimort, A. (ed.), *The church at prayer, volume 1: principles of the liturgy.* Collegeville: The Liturgical Press, pp. 202-7.
[252] Fazio. M., Moffett, M. and Wodehouse, L. (2013) *A world history of architecture.* 3rd ed. London: Laurence King Publishing Ltd., pp. 342-3.

chair. Ambos were to be fixed and clearly linked to the congregation, and choirs were encouraged to be both sufficiently defined to ensure that its purpose was clear, in addition to its connection to the gathered laity. The inclusion of a baptistery either connected to or within the church, highlighted this as another important function in the liturgy.[253]

The analysis of the liturgy with a specific spatial focus was, with a small number of exceptions uncommon until Rudolf Schwarz wrote *The Church Incarnate*. As mentioned, architects had already begun to apply new, modern forms of construction and aesthetic changes to churches, such as Perret's Notre Dame de Raincy (1923), but churches such as this were essentially still traditional in liturgical arrangement. Europe had begun to turn its back on Historicism during the last decade of the nineteenth century, and the most eminent architects were the main proponents of an emerging architecture, which would gradually develop into Modernism in varying ways as the twentieth century progressed. These included Theodor Fischer in Germany, Hendrik Petrus Berlage in the Netherlands, Karl Moser in Switzerland and Otto Wagner in Austria. They also had much influence over architectural progress as university lecturers and professors. Scandinavia too, gave rise to a movement - that of National Romanticism, with the likes of Sigurd Lewerentz as one its principal architects. Fischer's stance on tradition - that it should be bound up and perpetuated in the essence of a building, rather than its form, preceded and seemed to suggest a solution to the later, parallel developments in Scotland and the debate over Traditionalism versus Modernism.

The efforts of the Liturgical Movement to re-focus on a true liturgical life included attempts to promote a new type of church architecture. New churches in France and Germany, both before and after the Second World War, were notable for their modernity. These were not exercises in pastiche, but were architecturally creative. Rudolf Schwarz described the church building as, at once,

"an instrument of worship, a symbolic representation of the deepest relationships, and a sacred participation in creating the mystical body of the Lord"[254]

These churches importantly, according to Davis, "embody a new apprehension of the liturgy and, consequently, of the purpose and meaning of a church". This could be interpreted as an anticipation of the changes in liturgical structure and activity decreed at

[253] Martimort, A. (1983) 'Liturgical signs.' *In* Martimort, A. (ed.) *The church at prayer, volume 1: principles of the liturgy*. Collegeville: The Liturgical Press, pp. 202-7.
[254] Melhuish, N. (1962) 'Modern architectural theory and the liturgy.' *In* Hammond, P. (ed.) *Towards a church architecture*. London: The Architectural Press., p.64.

the second Vatican Council.[255] The German architect, Domenikus Bohm (1880-1955) was particularly inspired by the new liturgical concepts, and rapidly became a leading figure of modern ecclesiastical architecture in the 1920s.

In England in the 1930s Eric Gill's St. Peter at Gorleston-on-Sea (opened in 1939), and J.H. Langtry-Langton's Our Lady and the First Martyrs, Bradford (1935), challenged the status quo in their altar-centric plans within a cross-shaped plan and an octagon respectively.[256] In 1942 the Irish-American architect, Barry Byrne, wrote an article in the *Liturgical Arts* journal, wholeheartedly criticizing the persistence of historical or imported forms and layout for contemporary Catholic churches. His argument centres on the need for a living, evolving liturgy, and that this should be enhanced by the very fabric of the domus ecclesia, and not stifled by it. His resultant prototypical semi-centralized scheme is a radical departure from typical basilican layouts.

Similarly, the following year, the Reverend J.D. Crichton – perhaps in support of Byrne's criticisms - put forward his own idea for the perfect church layout. His 'Dream-Church' consisted of a centralised church diagram in an attempt to link architectural design more fundamentally with the liturgy. This time the idea of the centrality of the altar was taken to its logical and practical maximum, with seating arranged on three sides of the altar; the whole within a circular space with four projecting short arms of equal length, not unlike a Greek cross.[257]

In Scotland, Reginald Fairlie's Sacred Heart Church at Cowie (1937) features a octagonal layout with vernacular slated pyramidal roof. Yet, although externally there is a suggestion of a centralised plan, seating faces the sanctuary uniformly in the traditional manner, which along with the porch, is contained within an apse-like module projecting from the main body of the church.

A traditional liturgical narrative was still observed in the West of Scotland in the first of Gillespie, Kidd & Coia's new churches. St. Anne's, St. Patrick's, St. Columbkille's and St. Columba's all observe the traditional hierarchy of the laity facing the sanctuary and altar in a single block, in the manner of Counter-Reformation churches such as Il Gesu and re-

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[255] Davis, C. (1962) 'Church architecture and the liturgy.' *In* Hammond, P. (ed.) *Towards a Church Architecture*. London: The Architectural Press, p. 111.

[256] Proctor, R. (2014). *Building the modern church.* Farnham: Ashgate Publishing Limited, p. 142.

[257] Proctor, R. (2014). *Building the modern church.* Farnham: Ashgate Publishing Limited, pp.142-5.

ordered churches such as Sta. Maria in Ara Coeli, rather than medieval layouts where a choir sometimes interrupted the connection between the two. Gillespie, Kidd & Coia's early examples were supported by Pius X's direction on the accommodation of lay choirs in galleries, the negation of aisle seating for better visual connection with the altar, and generously proportioned sanctuaries to accommodate greater numbers of people kneeling at the altar rail during communion.[258] These liturgical concessions were given strong architectural expression in the cave-like barrel-vaulted volume of St. Anne's - made possible due to the minimisation of side-aisles, and the striking tall, semi-autonomous entrance volumes of St Columbkille's and St. Columba's, which house choir galleries over a narthex. The Tridentine ritual itself and its relationship to space was well illustrated in 1938 when St. Peter-in-Chains, Ardrossan, was formally opened by Archbishop Mackintosh on 2nd October. Records and photographs of the opening ceremony (fig.12) demonstrate that it was carried out with all the pomp and solemnity of a traditional Pontifical High Mass, with the Archbishop presiding over the ritual from his throne. During the consecration ceremony one of the priests in attendance – Fr. Frederick Pirrie – made emphatic connection with the new church - the first Roman Catholic church to be built in Ardrossan since the Reformation - both to the nearby ruins of the previous church on Castle Hill, and to Rome itself.[259]

Whilst Schwarz's writings could not have had any direct influence on Gillespie, Kidd & Coia's work in the 1930s, the processional model that he discusses in his Fourth Plan (fig. 13) reflects a common liturgical diagram with some of those early churches; the 'arching tunnel' (fig. 14),[260] expressed in the plastered barrel vault of St. Anne's and the Gothic framework of St. Columba's. As Schwarz suggests in his text, these are perhaps linked to a more fundamental concept of sacred procession found in the Early Christian basilica[261] and the all-embracing shelter of the Gothic church.[262]

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[258] Proctor, R. (2014). *Building the modern church.* Farnham: Ashgate Publishing Limited, p. 142.

[259] In naming the new church St. Peter-in-Chains, he spoke of a bridge with tradition to the previous church, frequented by the occupants of the fishing village, who would have known that their church was connected to Rome and to the basilica of the same name through St. Peter the fisherman.

[260] Schwarz, R. (1938) *Vom bau de kirche.* Heidelberg: Verlag Lambert Schneider (translated in 1958 by Cynthia Harris as *The church incarnate, the sacred function of Christian architecture.* Chicago: Henry Regnery Company).,p. 136.

[261] Ibid., p. 139

[262] Ibid., p. 135

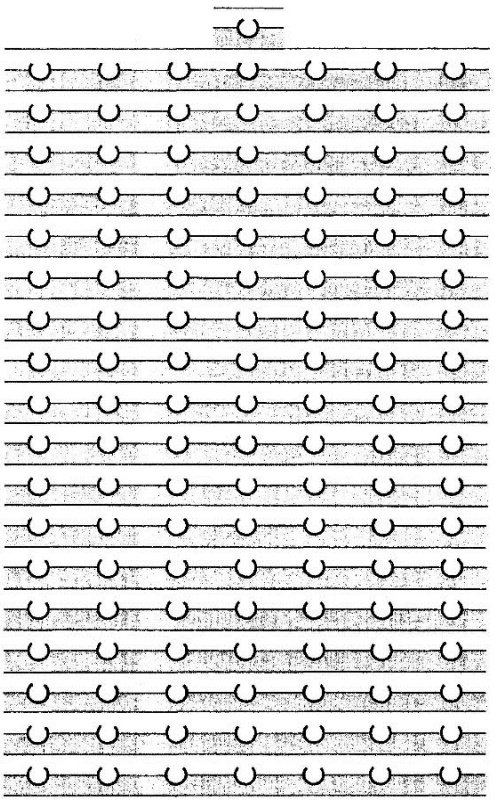

Fig. 13 ‘The fourth plan: Sacred journey: The way’

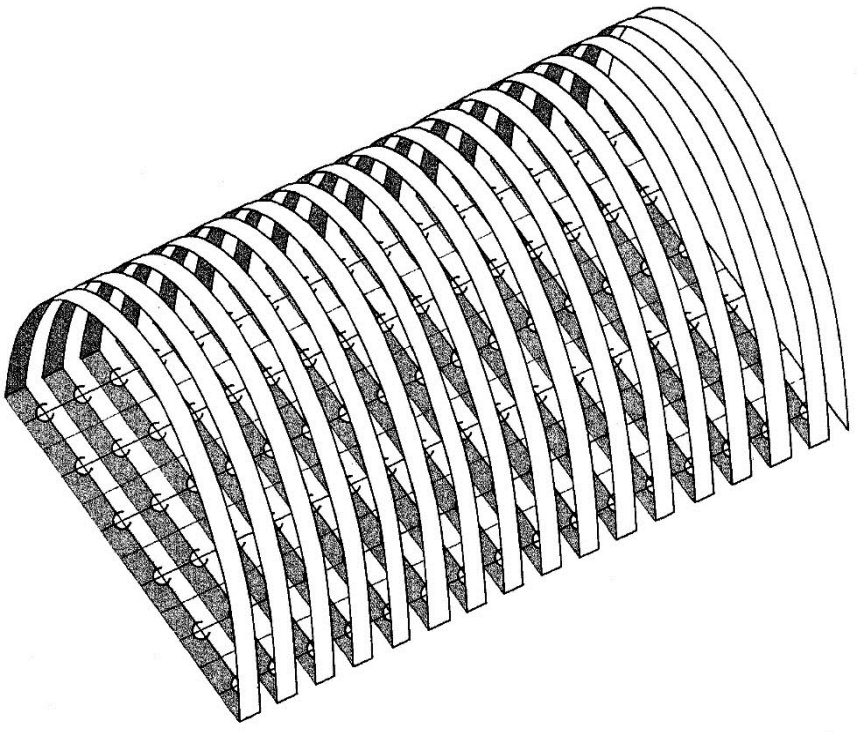

Fig. 14 ‘The fourth plan: Sacred journey: The way’: vaulting

Similarly, it could be argued that the overhead light described in Schwarz's Third Plan (fig. 15) is paralleled with the oculus retained in the Archbishop's Oratory, and then designed for the side chapels of the churches of St. Laurence and St. Michael. The simple oculi of Roman mausolea and its illusionistic and expressive use in the domes of Byzantine and Baroque churches suggest a possible precedent.[263]

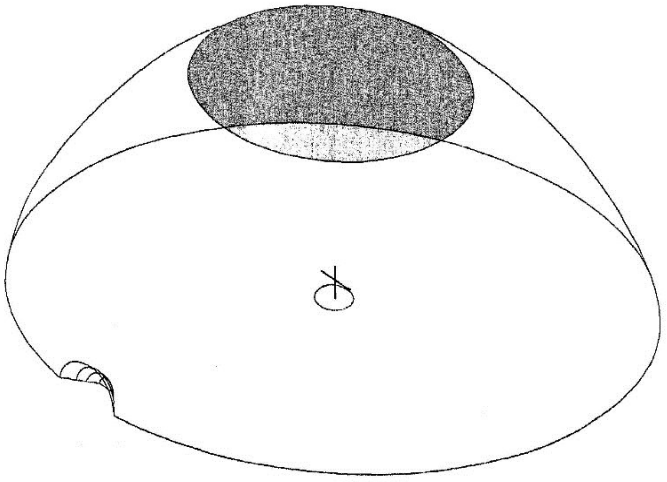

Fig. 15 'The third plan: Sacred parting: The chalice of light'

Despite any apparent similarities with the combinatory ideas of liturgy and architecture put forward by Schwarz, in the main Gillespie, Kidd & Coia's churches - particularly those built before the Second Vatican Council - more likely shared much older fundamental notions of liturgical experience and space. Aesthetically they did not share the same pared-back clarity of expression as Corpus Christi or St. Anna, Duren, with the exception of the Roman Catholic Pavilion, which began to approach something of the combined functionality and spirituality in architecture discussed in Schwarz. At the time of its building, there were those such as Peter Anson who recognised its potential as a vehicle for modern ecclesiastical architecture in Scotland.[264]

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[263] Schwarz

[264] Watters, D. (1997). Cardross Seminary: Gillespie, Kidd & Coia and the architecture of postwar Catholicism. Edinburgh: RCAHMS, p. 23.

From the mid-1960s more attempt at centralisation of the laity around the altar was evident in the churches of St. Joseph, St. Patrick, Kilsyth, Sacred Heart, Our Lady of Good Counsel, St Benedict, Easterhouse, St. Benedict, Drumchapel, St. Margaret and St. Columba, East Kilbride. By that time this was conversant with the 'fully conscious and active participation'[265] of the laity in the Mass, but also recalls Schwarz's early notions of centralisation in the 'Open Ring' gesture of his Second Plan.

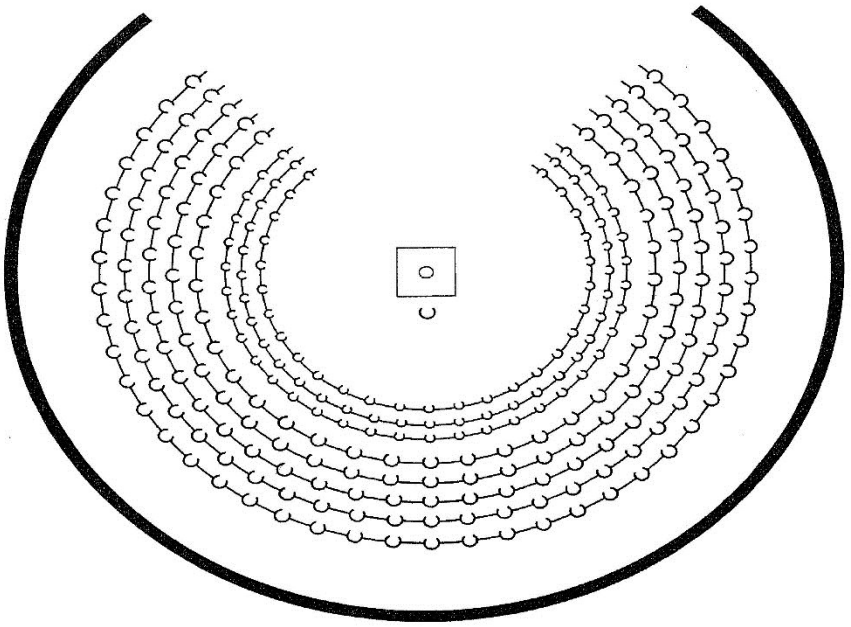

Fig. 16 'The second plan: Sacred parting: The open ring'

However, as Stroik argues in *Sacred Architecture* journal, the Second Vatican Council did not actually deem an entirely new form of ecclesiastical architecture necessary to serve the new liturgy[266]. Writing in the same journal, Randall Smith pithily illustrates a common misconception in 'modern' church architecture - the confusion of the functional 'ideas' of architectural modernism with a renewed idea of the liturgy[267].

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[265] Vatican (1963) *Constitution on the sacred liturgy Sacrosanctum Concilium.* [Online] [Accessed on the 2nd July 2017] http://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_const_19631204_sacrosanctum-concilium_en.html

[266] Stroik, D. (2007) 'Forma extraordinaria.' *Sacred Architecture*, Issue 13, August, p. 2.

[267] Smith, R. (2007) 'Don't blame Vatican II; modernism and modern Catholic church architecture.' *Sacred Architecture*, (13), 2007 pp. 12-18.

Gillespie, Kidd & Coia enact the two principal aspects of the liturgy – the Eucharistic rite centred on the altar, contained within a sanctuary, and the baptismal font – in a number of ways. Sanctuaries are either expressed as a predominantly wide, shallow space adjoining the nave, as a space at the termination of the nave that is implied by the subtle indentation of the side wall, or completely contained within the main space and defined only with fixtures or lighting. The different responses are not wholly representative of church chronology, although the later buildings following the Second Vatican Council tend to rely on the incorporated method, from St. Bride's, East Kilbride until the final commissions. The expressed sanctuary begins with St. Anne's, and continues into the early 1960s, even in the expressive, unconventional forms of St. Paul's, Glenrothes, St. Martin's, Castlemilk, and St. Mary's, Borrowstouness. The intermediate method first appeared in the post-war schemes, where churches such as Holy Family, where the south side of the building indents the bay closest to the sanctuary to define it liturgically. Similarly, at St. Matthew, Bishopbriggs, the sanctuary itself is defined only by being very slightly inset from the main body of the nave, and by a dais of three white marble steps, surmounted by an altar. Above, the ceiling level and treatment does not change, but although the baldacchino is compactly flattened to the ceiling, its chamfered timber profile acts as an effective liturgical marker within the sanctuary.

The dominance and position of the baptismal font is more varied, ranging from defined zones adjoining the principal building volume, in the case of St. Anne's, to its placing in a lateral bay at St. Columbkille's. This anticipates the near total separation of the baptistery that would occur at St. Charles's in the late 1950s, and St. Mary, Borrowstouness a short time later. In between were attempts to integrate a baptistery into a sequential experience, beginning with post-war churches such as St. Matthew's, St. Eunan's, and St. Michael's, near the entrance to the church, to the precise promenade-like staging of St. Paul's, Glenrothes and St. Bride's, which acknowledge a renewed interest in the baptismal ritual in the post-war years.[268] At St. Michael's, Dumbarton, although now altered, the baptistery was originally in the space now occupied by the library. The sense of dramatic procession is still palpable though. Ascent is from from Cardross Road, to the south entrance, through the large screen of glass and into the nave; then a pivot-point about a east-west axis, where the baptistery is situated to the west, lit by a large, shallowly-pedimented window at high level. The sanctuary dissolves in light at the far east end.

[268] Proctor, R. (2014). *Building the modern church.* Farnham: Ashgate Publishing Limited., p. 195.

As may be expected, the devotional element of the Stations of the Cross allow procession around the periphery of the church, as seen in the examples of St. Anne's (figs. 17, 18 & 19) and 19 Park Circus (fig. 20). However, at the Roman Catholic Chaplaincy, they are ranged along one side of the nave only, given the access opening in the west wall (figs. 21 & 22). Other churches demonstrate remarkable integration of the Stations of the Cross with the building fabric itself; at St. Martin's, Castlemilk, the sculpted panels form part of the angled window reveals, but although interesting, as Proctor asserts, their separation from the canonical wooden crosses, makes them seem somewhat peripheral (figs. 23 & 24).

Fig. 17 Interior of St. Anne's, Glasgow (1931-3), Gillespie, Kidd & Coia, showing nave, sanctuary and Stations of the Cross

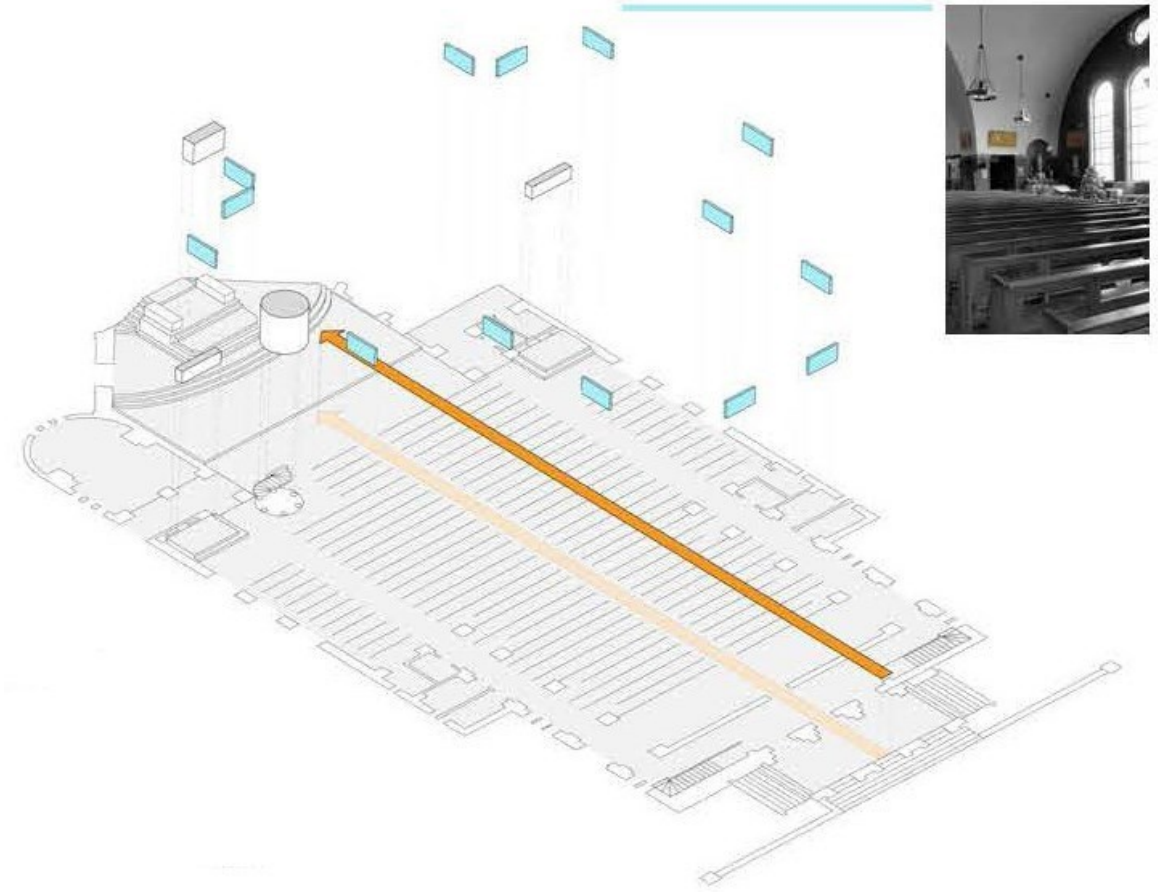


Fig. 18 Axonometric diagram showing Stations of the Cross (blue) and axial route to altar (orange) at St. Anne's, Glasgow (1931-3), Gillespie, Kidd & Coia

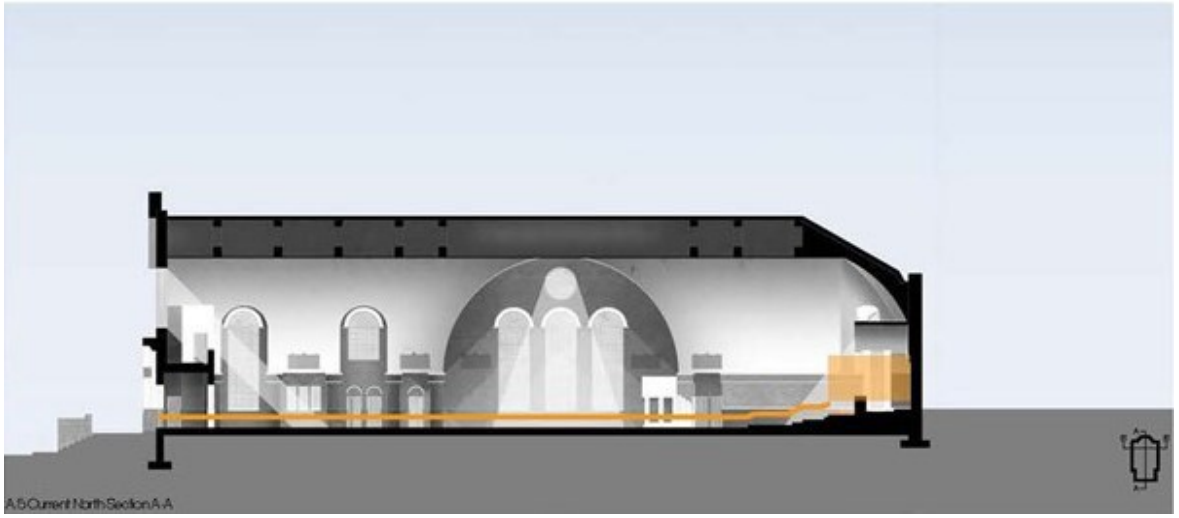


Fig. 19 Building section showing Stations of the Cross and axial route to altar (orange) at St. Anne's, Glasgow (1931-3), Gillespie, Kidd & Coia

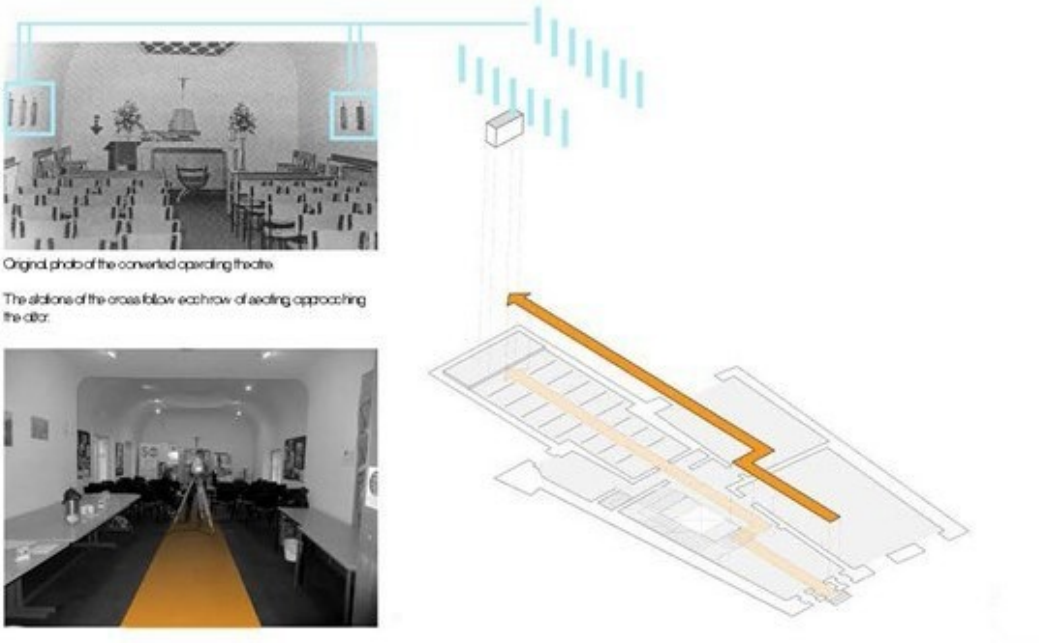


Fig. 20 Axonometric diagram showing Stations of the Cross (blue) and axial route to altar (orange) at the Archbishop's Oratory, 19 Park Circus, Glasgow (1948-55), Gillespie, Kidd & Coia

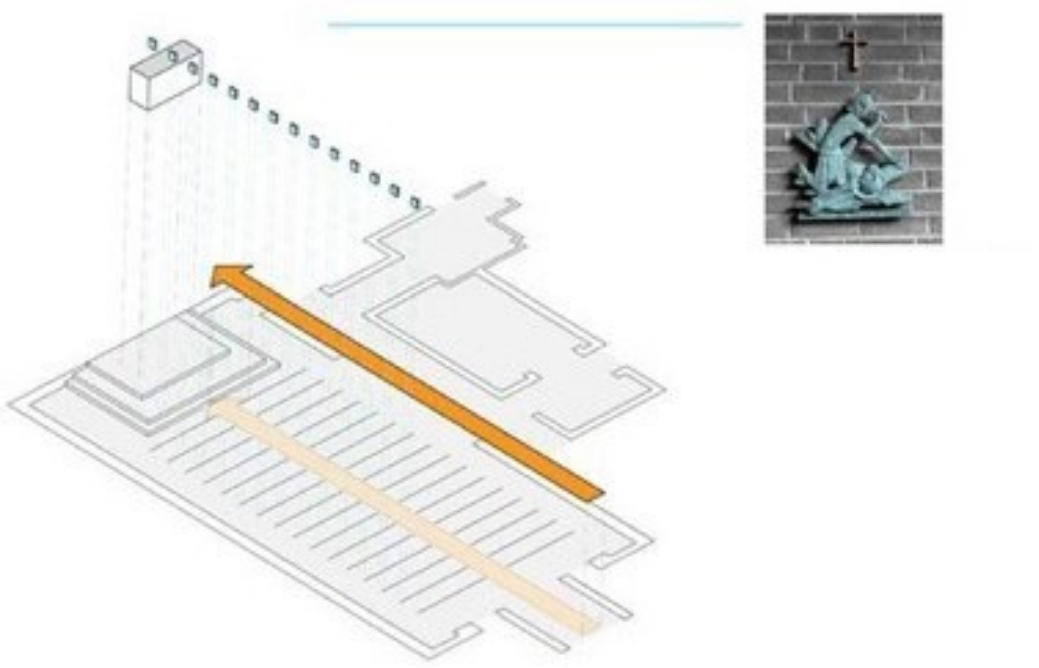


Fig. 21 Axonometric diagram showing Stations of the Cross (blue) and axial route to altar (orange) at the Roman Catholic Chaplaincy, Turnbull Hall, University of Glasgow (1955), Gillespie, Kidd & Coia (Alex Gabrysch & Zena Moore)

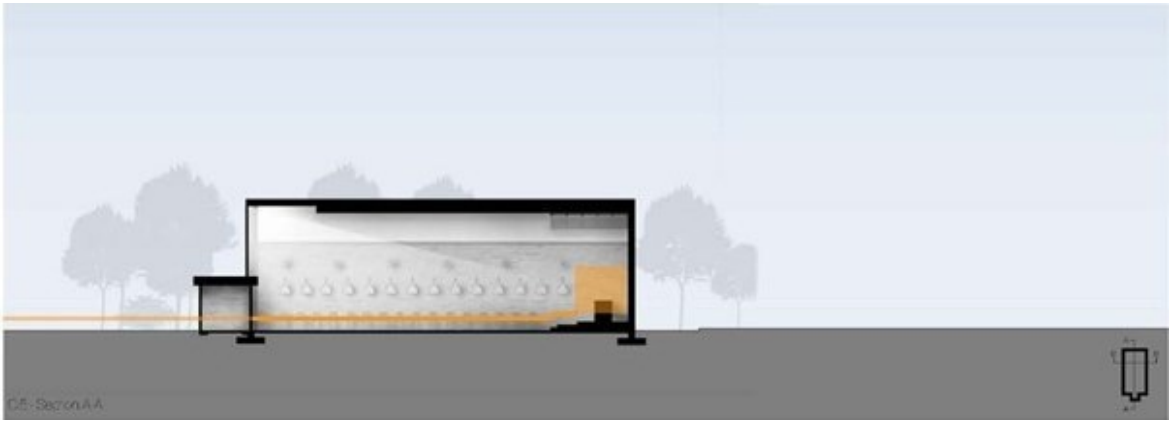


Fig. 22 Building section showing Stations of the Cross and axial route to altar (orange) at the Roman Catholic Chaplaincy, Turnbull Hall, University of Glasgow (1955), Gillespie, Kidd & Coia (Alex Gabrysch & Zena Moore)

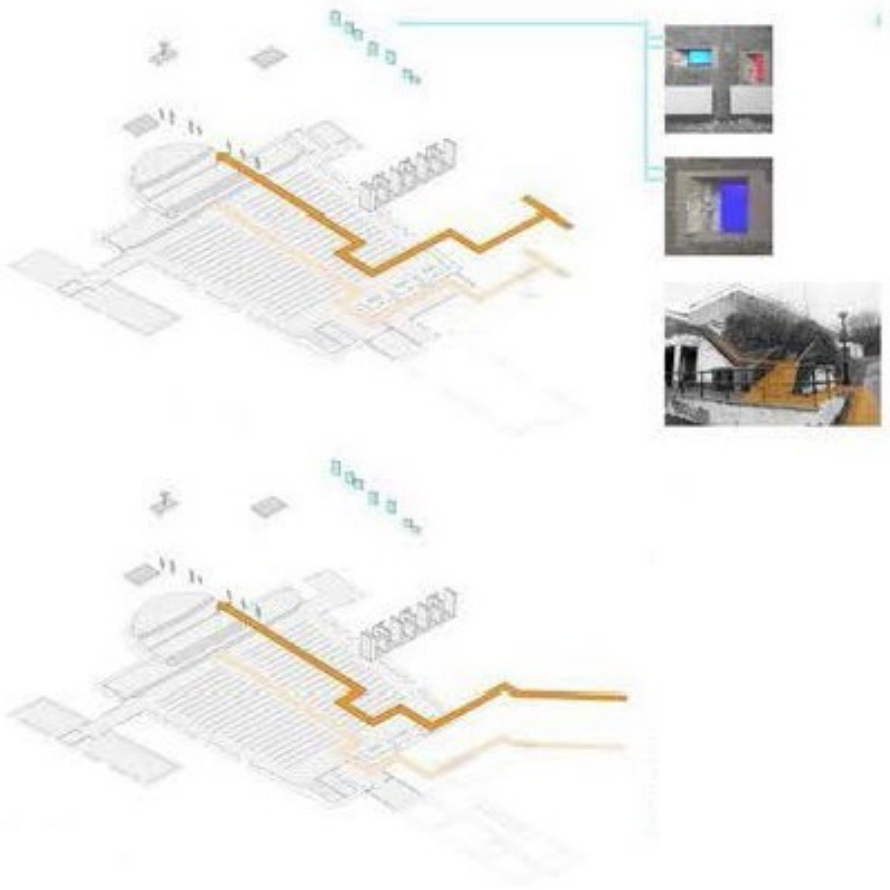


Fig. 23 Axonometric diagrams showing Stations of the Cross (blue) and route to altar (orange) at St. Martin's, Castlemilk (1961), Gillespie, Kidd & Coia (Alex Gabrysch & Zena Moore). The top diagram shows a later staircase that alters the original processional route into the church. The lower diagram shows the original angled stair and external portion of the route (Christina Lipcheva & Adam Whiting). See also photograph at https://www.architecture.com/image-library/ribapix/image-information/poster/roman-catholic-church-and-presbytery-of-st-martin-castlemilk-glasgow-stair-to-the-entrance-porch-wit/posterid/RIBA48570.html

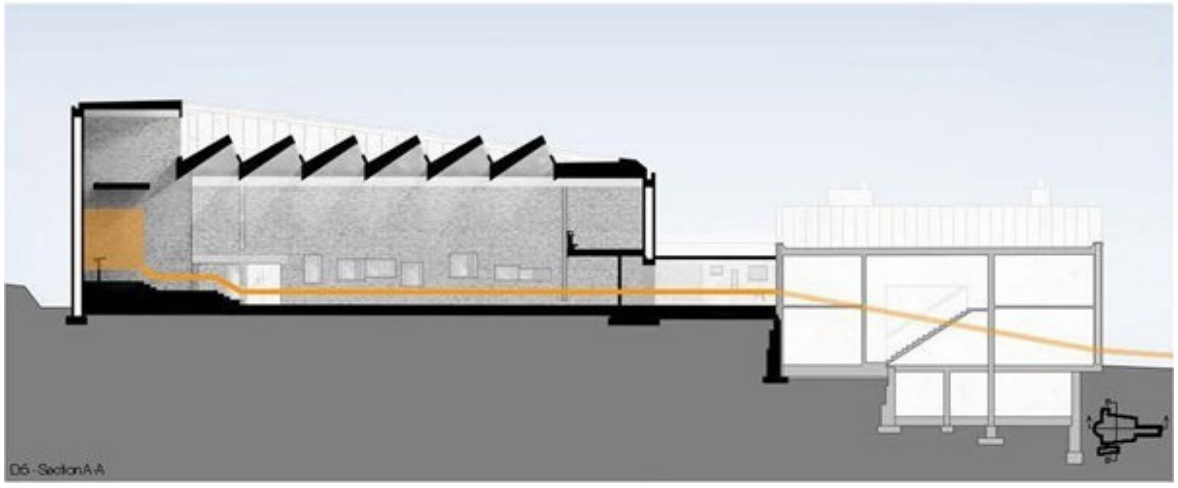


Fig. 24 Building section showing window recesses housing Stations of the Cross and axial route to altar (orange) at St. Martin's, Castlemilk, (1961), Gillespie, Kidd & Coia (Christina Lipcheva & Adam Whiting).

2.3 Plans

NB. Please refer to fold-out sheet in front pocket: *Gillespie, Kidd & Coia Comparative Ecclesiastical Plans*

Early Christian and Byzantine churches provide an opportunity for the study of the fundamental plan types common to Western ecclesiastical design for many centuries; namely longitudinal and centrally planned churches. These plan types dealt with a number of issues connected to the liturgy, or to construction or aesthetics. After the fall of the Roman Empire the western church (which would become the Roman Catholic Church) placed great importance on axial layouts for processional aspects of the liturgy, made clear spatial distinctions between the clergy and the laity, and often lent itself to the accommodation of pilgrims within the space. This plan type often drew influence from the longitudinal hall-like spaces of ancient Roman basilicas. Sometimes transepts on either side of the chancel transformed the basilican layout into a Latin Cross plan. These lofty spaces were lit laterally by clerestorey windows and were abutted by lower side-aisles, and terminated by an apse. In the western church, instances of centralised church plans tended to be associated with smaller or more private, devotional spaces such as mausolea, martyria or baptisteries.[269]

The eastern, Byzantine church, generally believed to have been distinguished from the Early Christian epoch by the reign of the Emperor Justinian (527-65) was characterised by substantial variation in plan type. In addition to continuing the axial tradition of the basilica, as in the case of Hagia Sophia, Byzantine churches also adopted the centralised layouts of Roman and devotional Early Christian buildings, creating a range of layouts that included circular, Greek Cross and quicunx plans,[270] connecting more modularized space with barrel vaults and covering them with domes. In contrast to the western church, Byzantine layouts highlighted the Mass rather than processional aspects of the liturgy[271].

Generally a long processional axis with a predominantly axial layout is associated with the Tridentine Mass, although this approach is not precluded from the Novus Ordo. In

[269] Fazio. M., Moffett, M. and Wodehouse, L. (2013) *A world history of architecture.* 3rd ed. London: Laurence King Publishing Ltd., pp.133-151.

[270] A nine-bay plan describing a central cross

[271] Fazio. M., Moffett, M. and Wodehouse, L. (2013) *A world history of architecture.* 3rd ed. London: Laurence King Publishing Ltd., pp. 133-151.

Gillespie, Kidd & Coia's churches this approach is confined to the church itself; the site composition as a whole frequently being asymmetrical in the siting of the presbytery.

Gillespie, Kidd & Coia's churches fall into three main plan types; those that are based on a straight processional axis as described earlier, those which employ the concept of the *promenade architecturale* as demonstrated by Le Corbusier and seen in the chapel of Notre-Dame-du-Haut at Ronchamp, and those that are based on a form of centralisation. The first type is usually basilican, with some variation through the incorporation of short transepts and other secondary spaces off the main axis (actually quite 'functional' in the architectural sense) and are connected with the traditional form of the liturgy, whilst also able to respond to changes in thinking that were part of the Liturgical Movement. The other, also strongly ceremonial, is based on the concept of spatial revelation and discovery such as Le Corbusier, derived from an experiential appreciation of the route to the Athenian Acropolis. This design approach is acknowledged in the work of Gillespie, Kidd & Coia by Rodger.[272] Routes that began externally and ended at the altar were cast around a range of plan forms including wedge-shapes, rectangular boxes and cubes. As we have seen, centralised plan forms in themselves were not a new concept in the spatial arrangement of a church. The first emphasises longitudinal procession, the second the changing perspectives of the route and architecture of the buildings themselves, and the third directly focuses on the altar.

Axial plan types

A large number of the firm's churches were underpinned by an approach centred on a longitudinal axis like the Early Christian basilicas, with the earlier schemes (St. Anne's St. Patrick's, St. Columbkille's, St. Columba's and St. Peter in Chains) tending towards a centrally positioned axis generally with symmetrically organised accommodation around it.

All of the churches mentioned above display a traditional, staged approach, which requires visitors to pass, sometimes incorporating a significantly stepped level change (St. Anne's and St. Patrick's) through a distinctively articulated intermediate zone or narthex, housing a choir gallery, before proceeding on axis into the nave and towards the altar. The largest space, before that of the sanctuary, was organised in numerous ways, either split into hierarchical groupings or unified into one zone.

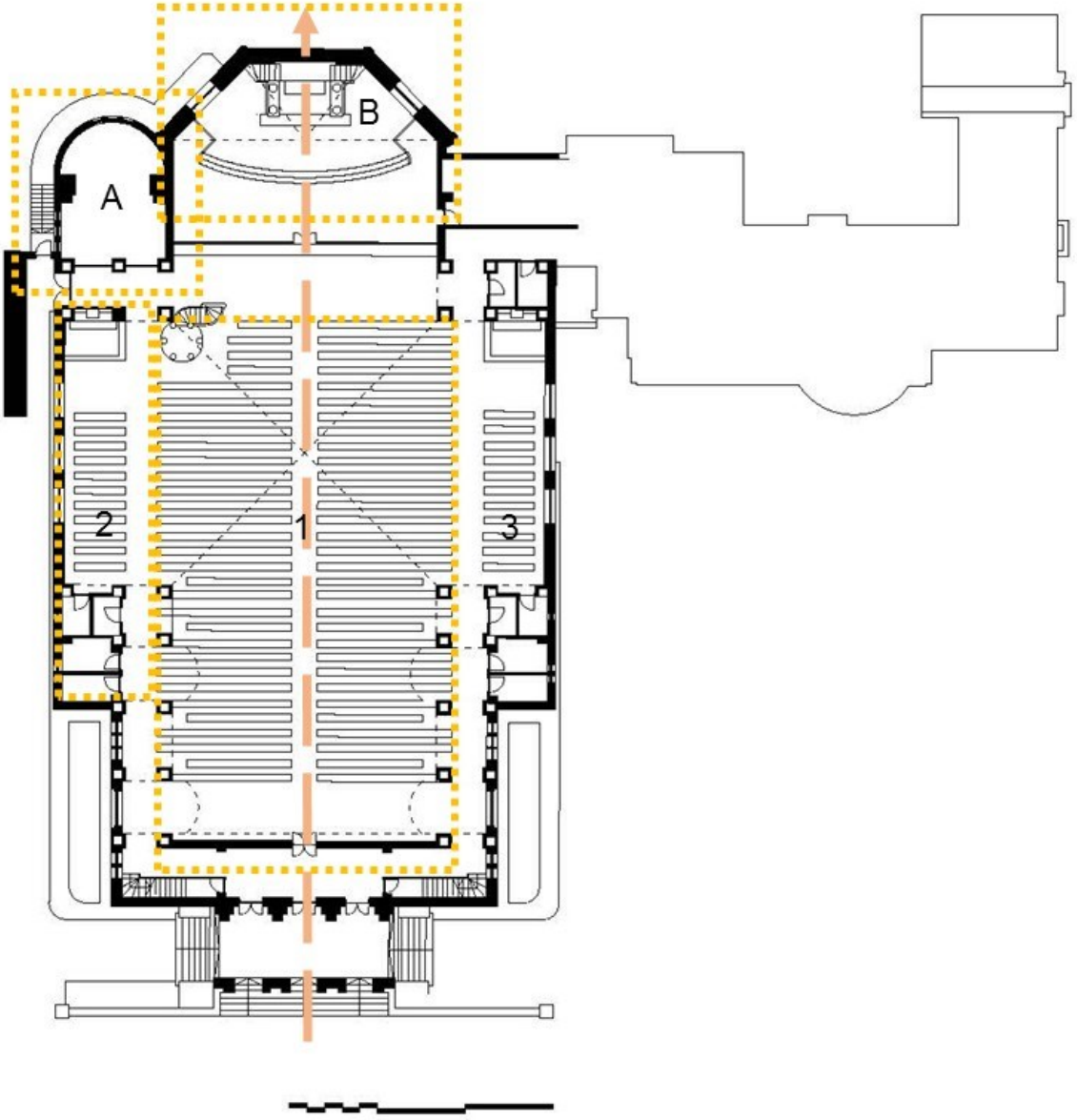
272

Of the former type, St. Anne's (fig. 25) is a good example, consisting of three parallel zones, aligned and orientated longitudinally to produce a distinct spatial hierarchy. Beyond the transitional narthex, entry is effectively into a single principal space consisting of a nave, which culminates axially in a relatively shallow sanctuary ending in an angled apse.[273] Side-aisles transform into short arcades, which represent a functional attempt at zoning, serving the confessionals. The layout of St. Anne's reflects an increasing emphasis on spatial legibility and corresponding participation of the liturgy whilst still observing the traditions and underpinning axial characteristic of the Tridentine Mass. The placing of the baptistery at the altar end rather than at the threshold to the church intimates inclusion, and the substitution of conventional side-aisles with arcades increases the sense of participation and emphasis on the central ritual of the Mass. This spatial reduction of side-aisles is common to all of Gillespie, Kidd & Coia's 1930s churches but the churches of St. Anne and St. Peter in Chains (fig. 29) both house widened zones on each side of the nave serving not as side-aisles but as side-chapels with their own longitudinal focus parallel to that of the nave. At St. Anne's this takes the form of wide but very shallow transepts, while St. Peter in Chains incorporates them into a single, hall-like space of uniform width. St. Anne's is largely homogenous in design terms because its broadness relative to its length and the low-arched vaulting of the ceiling consolidate to form a focal point just before the sanctuary.

A striking example of the latter type occurs at St. Patrick's, Greenock (fig. 26), which simply consists of a nave with a sanctuary, lacking the parallel side-chapels of St. Anne and St. Peter in Chains. The physical restrictions of site may have been a contributory factor in this decision. St. Columba's, Woodside (fig. 28), bears a similar tautness of plan outline. In contrast, the church of St. Columbkille (fig. 27) introduces a very short cross axis before the sanctuary; a notional transept housing the baptistery with angled end walls, which is a feature that increases a sense of centrality between the sacraments of baptism and Eucharist. As discussed, St. Anne's was also designed with a baptistery close to the liturgical focus of the church, parallel to the sanctuary.

Although of varying forms, the sanctuaries in all of the 1930s churches allow a high level of visual connection with the altar, even in its original position against the rear wall, and were designed traditionally as the focus of an axis (see also sectional drawings in figs. 19, 22 & 24).

[273] St. Anne's both re-interprets and intensifies late nineteenth-century Gothic Revival churches built in the Glasgow area by Edward Welby and Peter Paul Pugin. These favoured the basilican layout with shallow sanctuary, which enabled the congregation to enjoy a greater sense of participation in the mass in contrast to the lengthy and somewhat separated elements of the medieval layout with choir favoured by their father.



A: baptistery

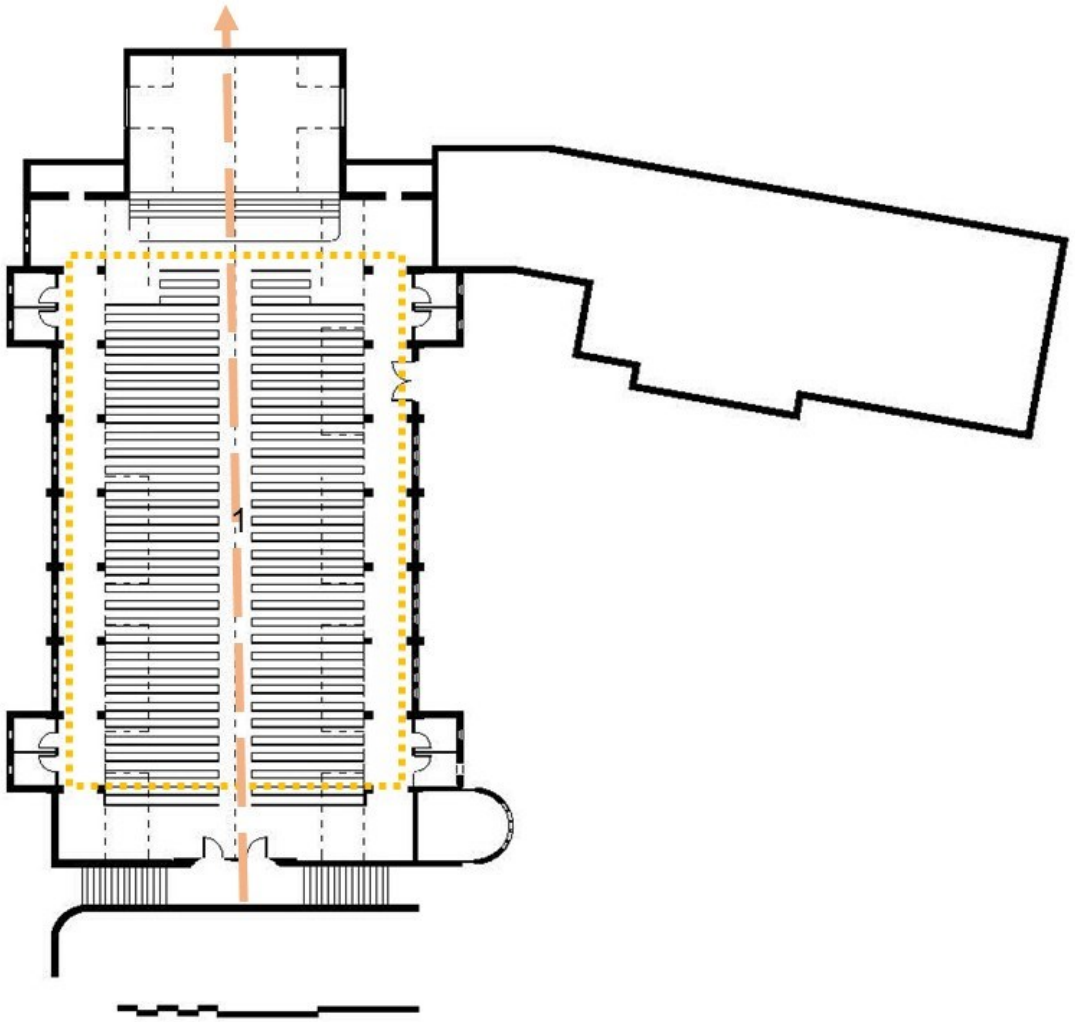
B: sanctuary

1: zone 1

2: zone 2

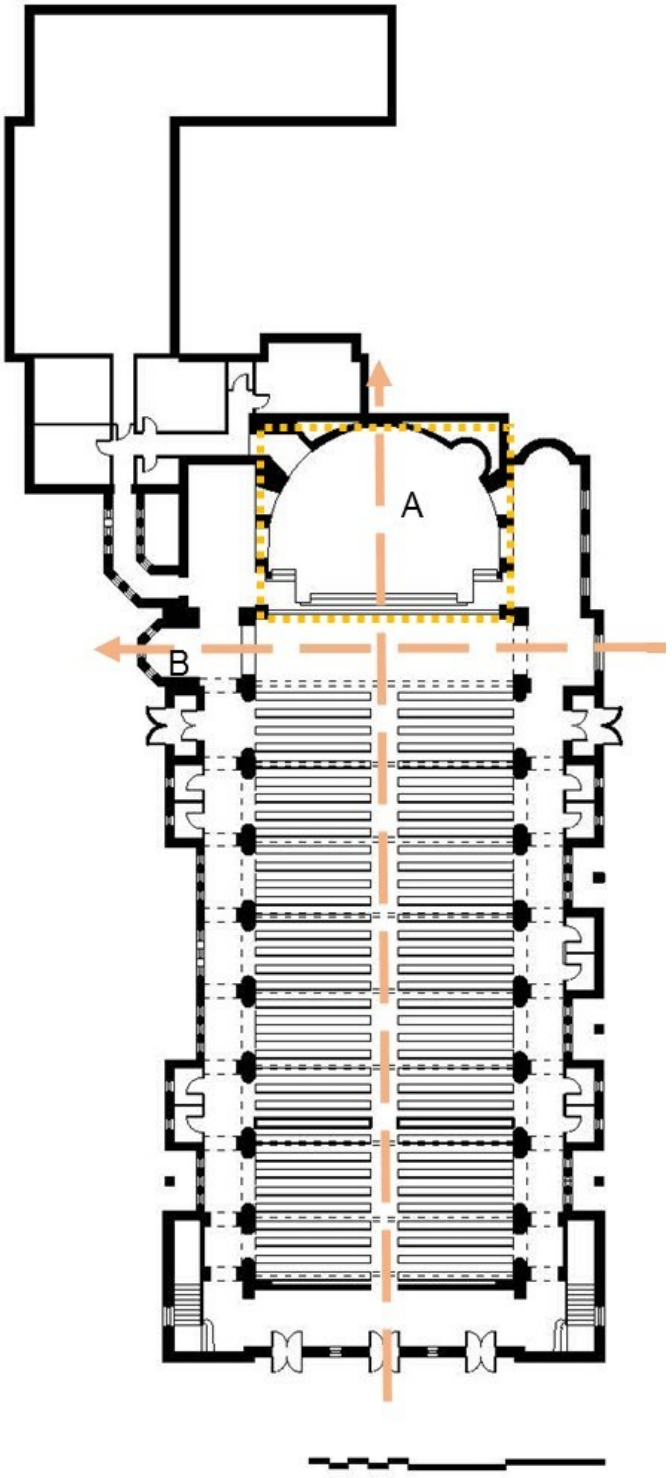
3: zone 3

Fig. 25 Single axis layout: St. Anne's, Glasgow (1931-3), Gillespie, Kidd & Coia: Ground floor plan



1: primary zone

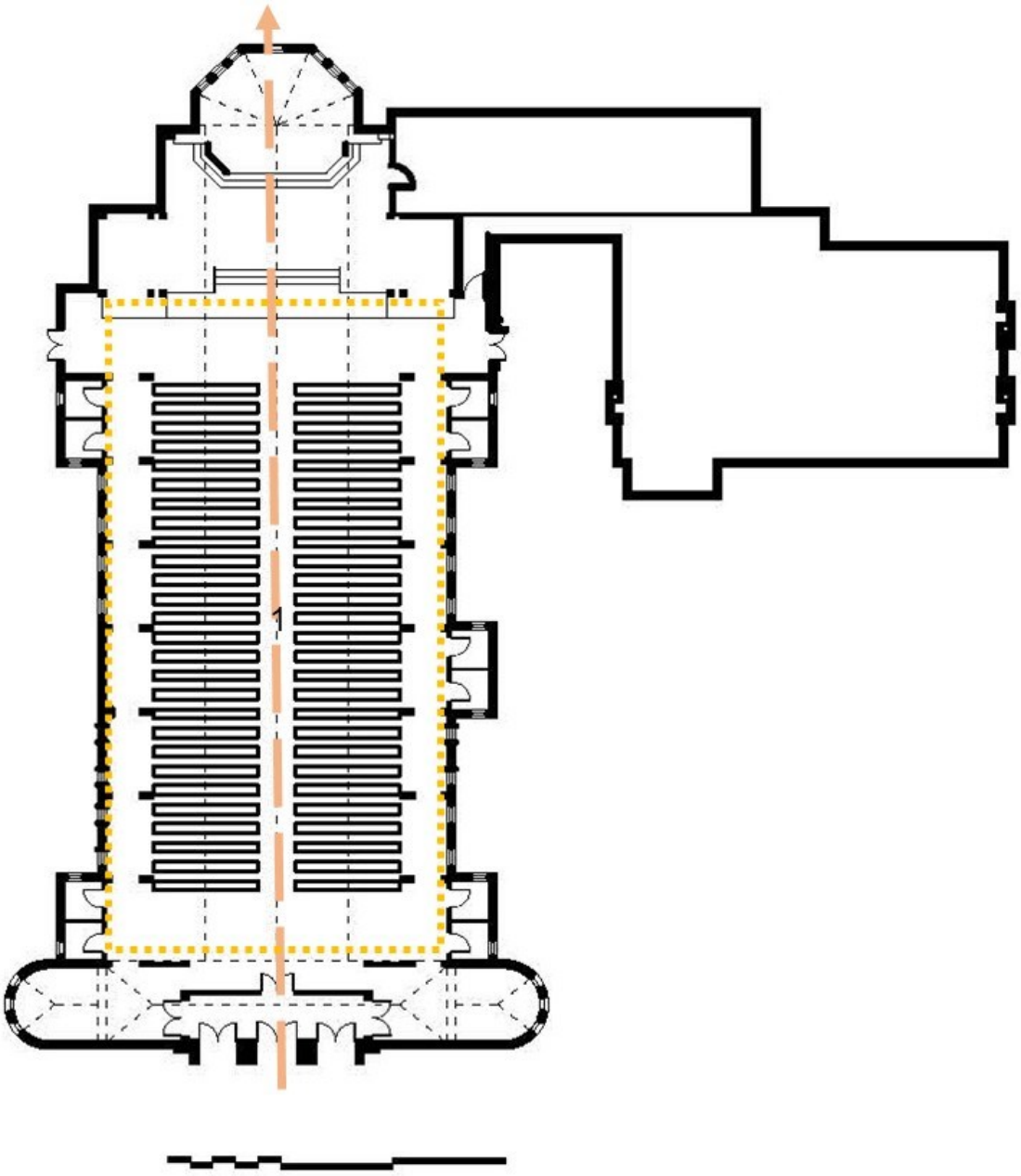
Fig. 26 Single axis layout: St. Patrick's, Greenock (1934), Gillespie, Kidd & Coia: Ground floor plan



A: sanctuary

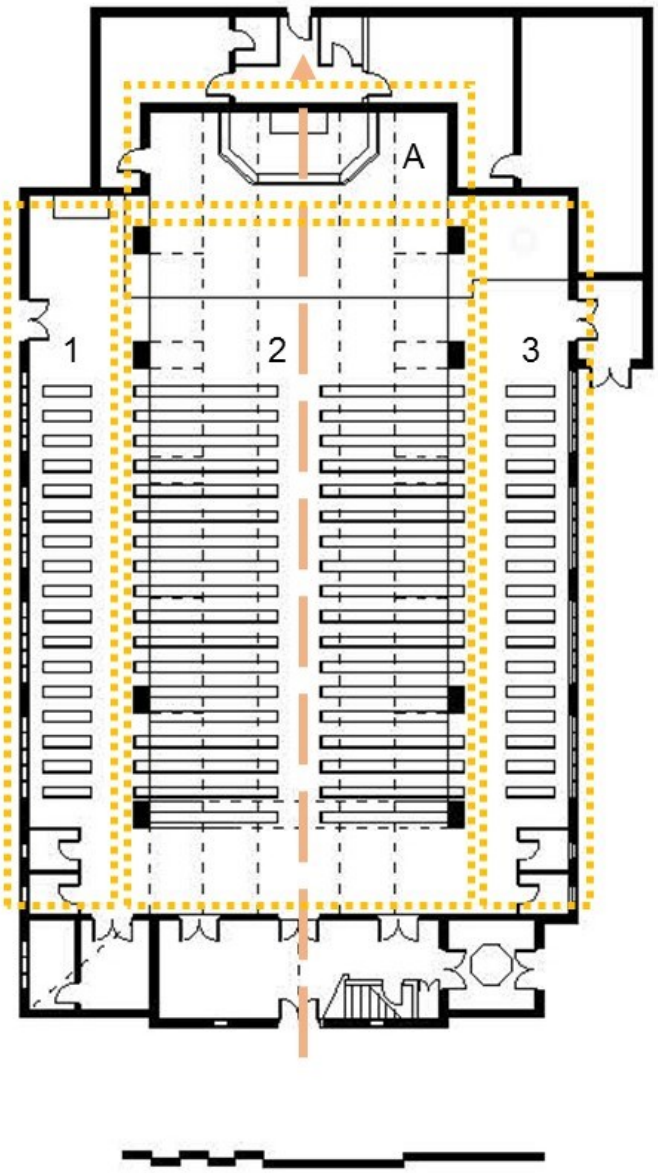
B: baptistery

Fig. 27 Primary axis with secondary cross axis: St.Columbkille's, Rutherglen (1934-40), Gillespie, Kidd & Coia: Ground floor plan



1: primary zone

Fig. 28 Single axis layout: St.Columba's, Glasgow (1937-8), Gillespie, Kidd & Coia: Ground floor plan



A: sanctuary

1: zone 1

2: zone 2

3: zone 3

Fig. 29 Single axis layout: St. Peter in Chains, Ardrossan (1938), Gillespie, Kidd & Coia: Ground floor plan

The traditional axial layouts of the 1930s underwent subtle experimentation in the post-war period. While relatively few churches were planned in the 1940s, those that were - Holy Family (not completed until 1959), and St. Joseph's - continued the pattern of longitudinally-planned churches already established before the Second World War. Holy Family (fig. 30), however, develops the site relationship of the earlier churches and

presbyteries into a type of ecclesiastical precinct consisting of church, presbytery, campanile and hall. As with St. Anne's and St. Patrick's, the main entrance is reached by way of a flight of steps, though here they give onto a raised terrace. Internally the hierarchical route continues via a transitional narthex but with greater visual clarity to the space beyond due to the reductive quality of a glazed screen in place of a solid wall. On the north side access to the confessionals accords with an element that projects laterally out from the main body of the church.

In the 1950s, while the traditional processional arrangement with the approach towards the altar continued[274] - with the particularly notable example of the large church of St. Laurence, Greenock (fig. 31), an alternative approach appeared more widely. First seen at St. Joseph's, Greenock (fig. 32) was an entrance perpendicular to the main axis, introducing an opportunity to vary the processional approach and disposition of liturgical functions such as the baptistery, and ancillary spaces in contraposition to the altar. Some churches were designed with a canopied main entrance on their long elevation, pivoting on an axis within the baptistery to the left and nave and sanctuary to the right, such as St. Matthew's, Bishopbriggs[275] (fig. 34), St. Eunan's (fig. 35), St. Kevin's, Bargeddie (fig. 36) and St. Maria Goretti (fig. 38), and those with the main entrance on the short elevation such as St. Michael's, Dumbarton (fig. 39). St. Matthew's also varies the position of the confessionals - for the first time they do not flank the nave laterally but instead appear at the start of the nave - along with St. Eunan's, Clydebank (fig. 35), St. Kevin's, Bargeddie (fig. 36), and St. Kessog's, Balloch (fig. 37). Although this may initially have been a design solution to compensate for their relative narrowness, the device develops as part of the architectural promenade of St. Paul's, Glenrothes and St. Bride's, East Kilbride as if to demarcate a transition between arrival at the church entrance and the liturgical space of the nave.

Two further variations on the axial plan type occur in the use and placement of campanile, and in internal structural expression. An example of the first can be seen in the church of St. Joachim, Carmyle (fig. 40). The entrance to this church is on its long elevation, but not in the articulated manner of St. Matthew's. Instead, it has a campanile, which serves as the main entrance to the church, amongst other functions. Use of campaniles as entrances occurs again at St. Paul the Apostle, Shettleston (fig. 41), a relatively modest basilican layout preceded by a large portal-like campanile. Unlike St. Joachim's

[274] It was still a widely accepted design approach and suited the conservatism of the Archdiocese of Glasgow. For distinction in liturgical style between the Mass as delivered in Glasgow compared to Edinburgh, see Walsh, P. (1962) 'Letters to the Editor, the Dialogue Mass.' *The Tablet.* [Online] 10th November [Accessed 2nd July 2017] http://archive.thetablet.co.uk/issue/10th-november-1962/20/2192#scanned

[275] Drawing number 3988/CR/274 – 48/278, 29th June 1948, 'South elevation, proposed new church - St. Matthew's – Bishopbriggs.' Source: St. Matthew's Church, Bishopbriggs.

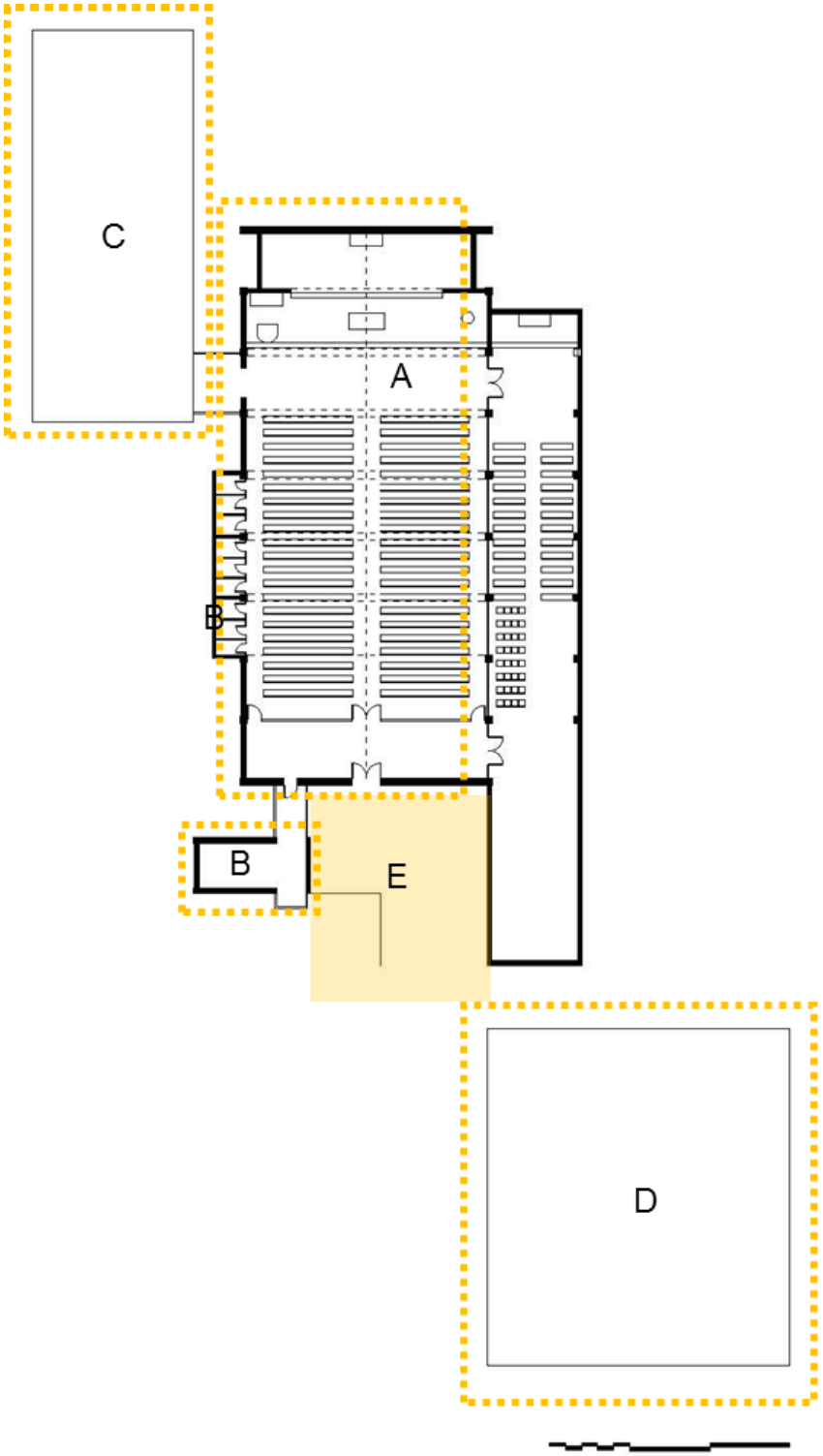
campanile, however, the structure at St. Paul the Apostle is placed on the short, main elevation, increasing the sense of ritual procession into the building.

The second variation occurs in a number of the longitudinal churches designed from the 1940s until the early 1960s that place less emphasis on plan symmetry than those of the firm's first decade of practice. This occurs alongside a simplification in massing, section and the use of structure to define particular areas of the church. At St. Kessog's, Balloch (fig. 37), for example, a side-chapel, sacristy and secondary entrance occupy the north-west portion of the building, defined by a simple row of columns. St. Mary of the Angel's, Camelon (fig. 42), on the other hand, makes full use of a row of structural timber columns to separate the wider nave from the narrower side-chapel. The structure here also demarcates a change in roof level over the two spaces. At St. Mary of the Angels, much of the interest occurs internally. The church is entered through a narthex which extends across the entire north front of the building. The visitor ascends a number of steps onto the principal level of the church, with a further stair leading to a gallery within the taller volume of the nave. The asymmetrical nature of the aisle lends an oblique view to the altar, but has a direct view to the tabernacle within the sanctuary.

On the eve of the Second Vatican Council, the basilican layout of St. Charles, Kelvinside[276] demonstrates that retention of this plan type does not preclude the possibility of innovation and relevance in the alternative form of the liturgy. [277]

[276] Drawing number CK/1C, September 1957, 'Proposed new church – St. Charles – Kelvinside per the Rev. Fr. V. O'Sullivan, additions + amendments to approved plans. Scale 1/8''=1'-0''.' Source: Mitchell Library, Glasgow, and Drawing number CK/1C, (no date) 'Amended (gallery) plan, proposed new church for St. Charles mission, Kelvinside. Scale 1/8''.' Source: Michell Library, Glasgow.

[277] Proctor, R. (2014). *Building the modern church.* Farnham: Ashgate Publishing Limited, p. 185.



A: sanctuary

B: campanile

C: presbytery

D: hall

E: precinct

Fig. 30 Single axis layout: Holy Family, Port Glasgow (1946-59), Gillespie, Kidd & Coia: Ground floor plan

Fig. 31 Single axis layout: St. Laurence's, Greenock (1951-4), Gillespie, Kidd & Coia: Ground floor plan

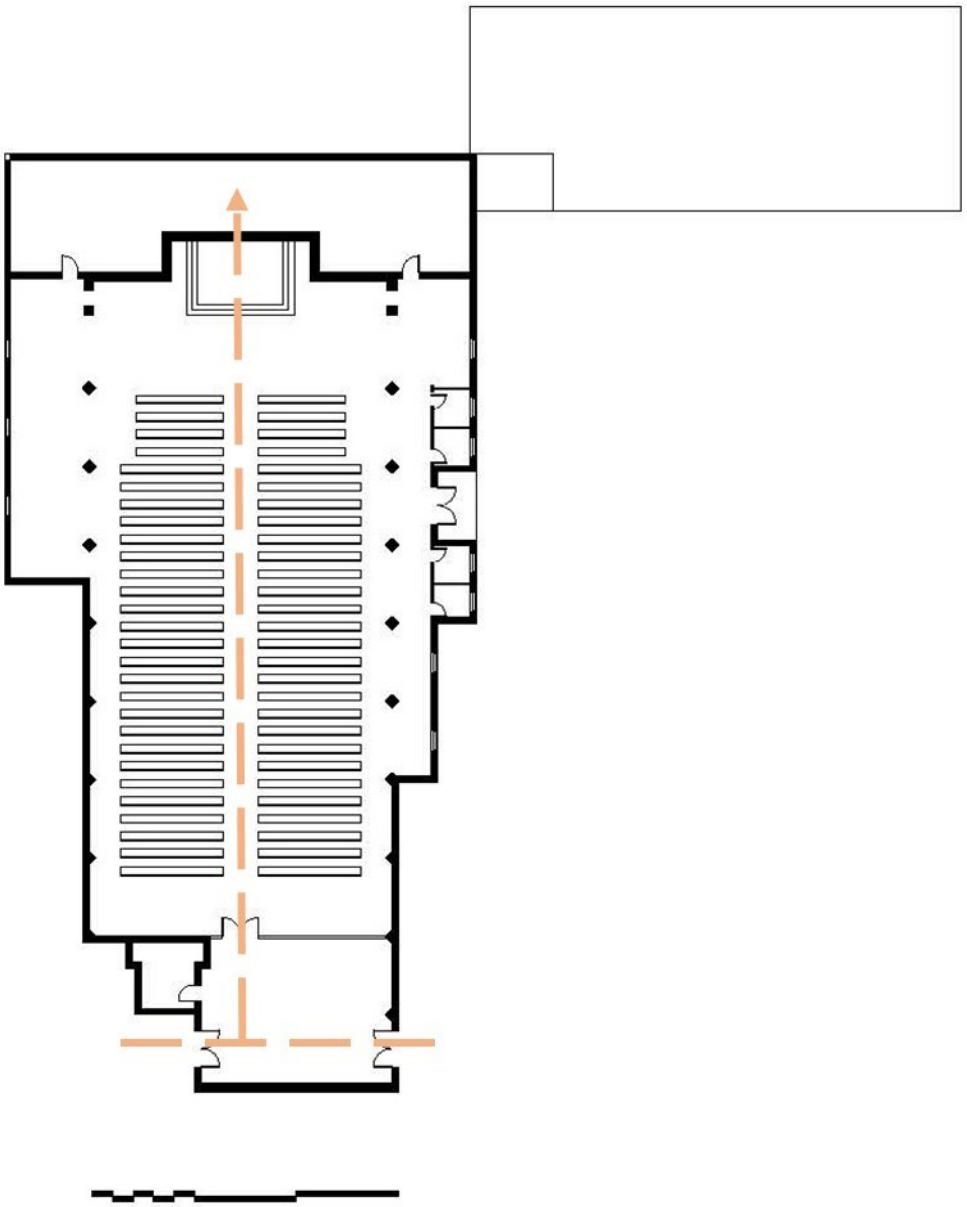
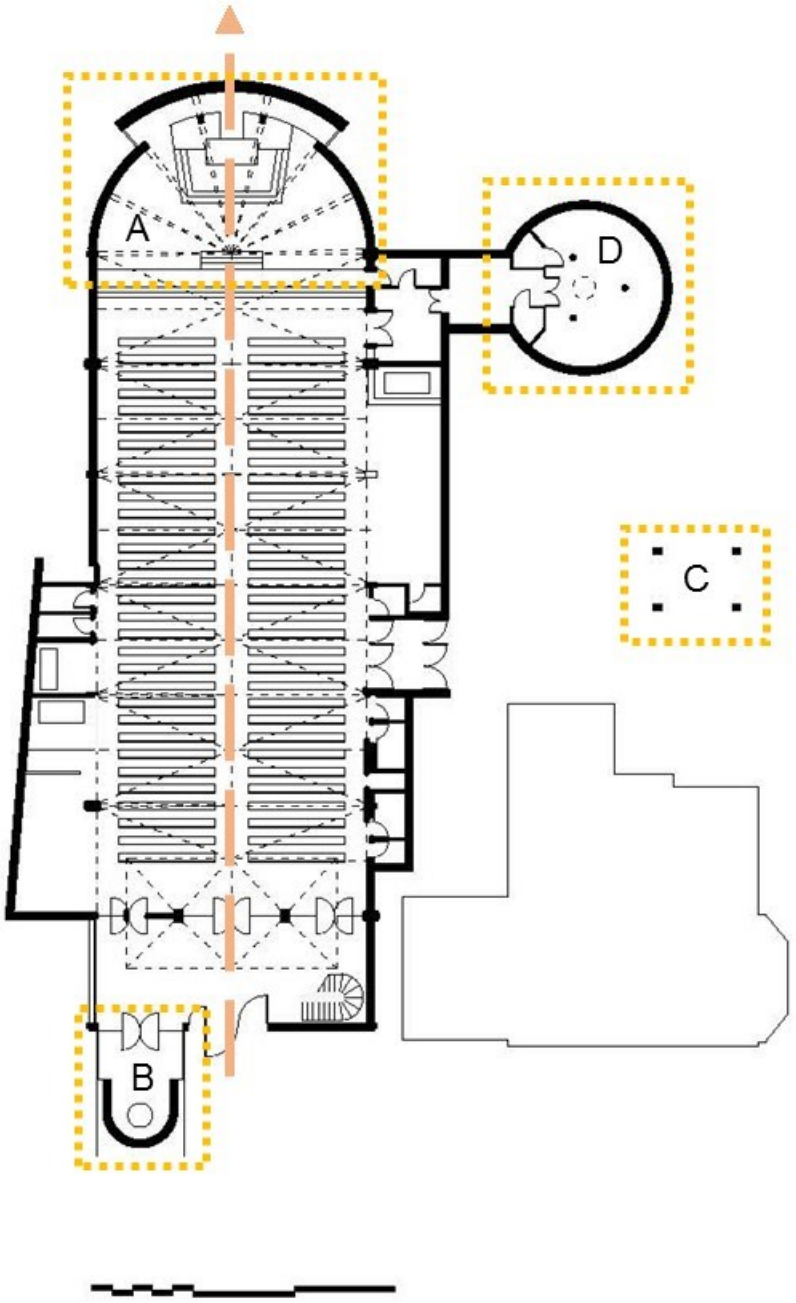


Fig. 32 Multiple axes: St. Joseph's, Greenock(1947-50), Gillespie, Kidd & Coia (author): Ground floor plan



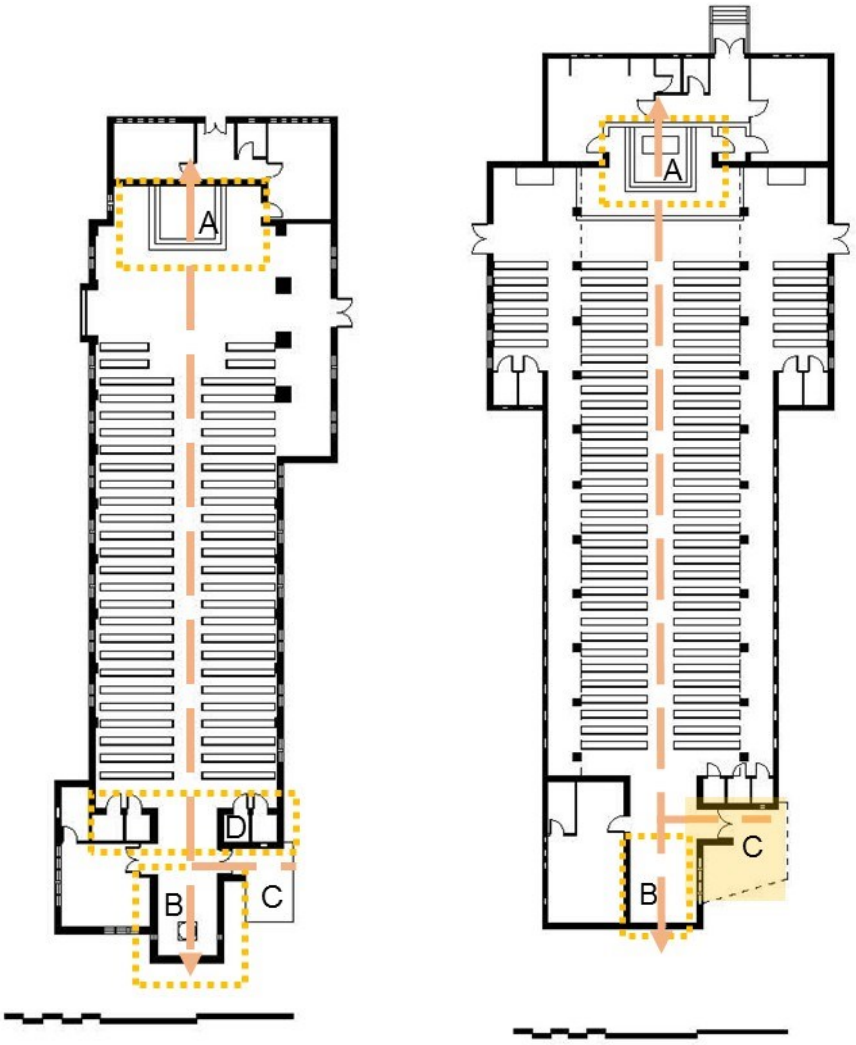
A sanctuary

B baptistery

C campanile

D priests' sacristy

Fig. 33 St. Charles Borromeo, Kelvinside (1959), Gillespie, Kidd & Coia (author): Ground floor plan



A sanctuary

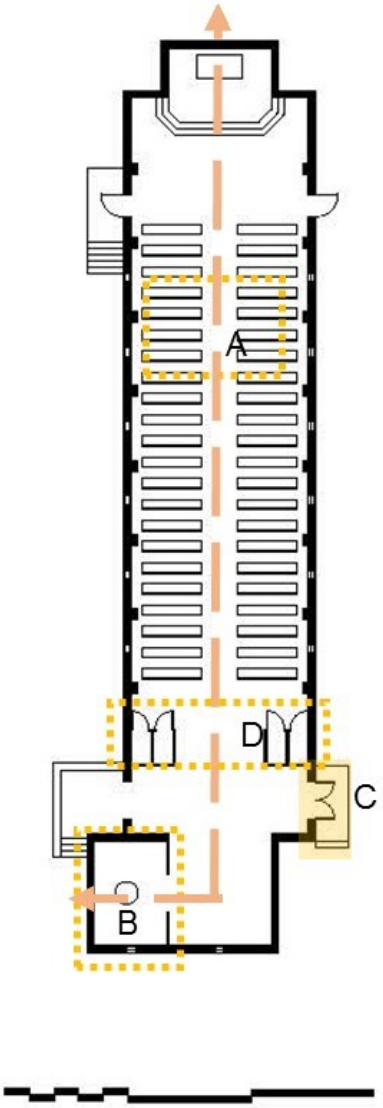
B baptistery

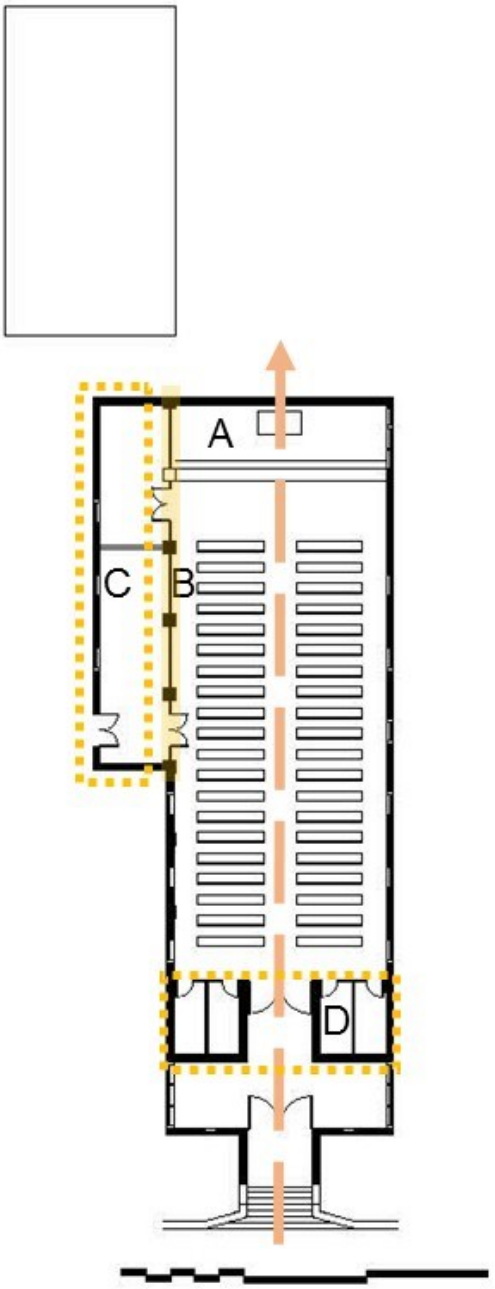
C canopied entrance

D confessionals

Fig. 34 (above left) Multiple axes: St. Matthew's, Bishopbriggs (1950), Gillespie, Kidd & Coia: Ground floor plan

Fig. 35 (above right) Multiple axes: St. Eunan's, Clydebank (1950), Gillespie, Kidd & Coia: Ground floor plan





A: sanctuary

B: baptistery

C: canopied entrance

D confessionals

A: sanctuary

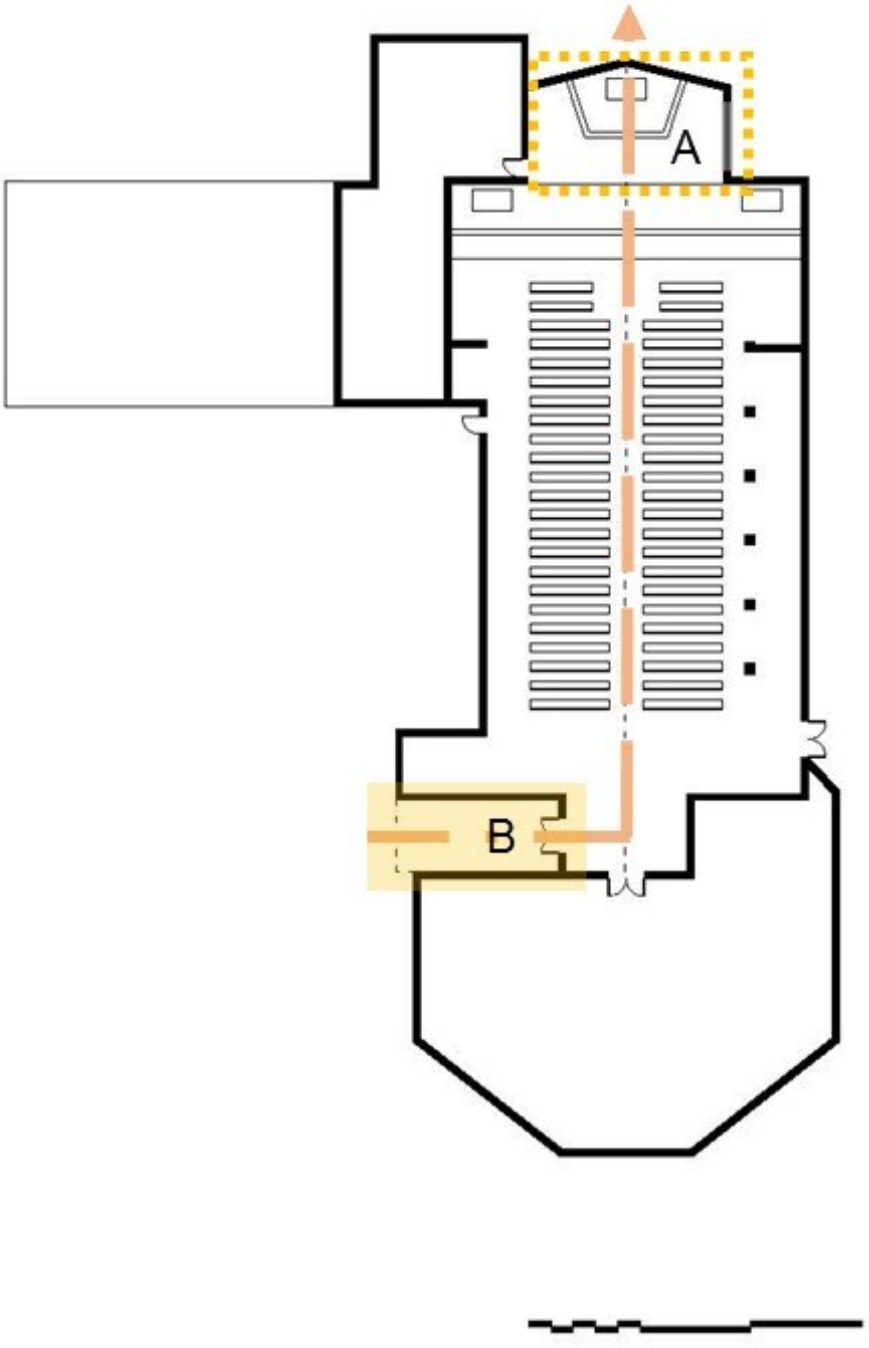
B: separating structure

C: side chapel + sacristy

D: confessionals

Fig. 36 (Above left) Multiple axes: St. Kevin's, Bargeddie (1950), Gillespie, Kidd & Coia: Ground floor plan

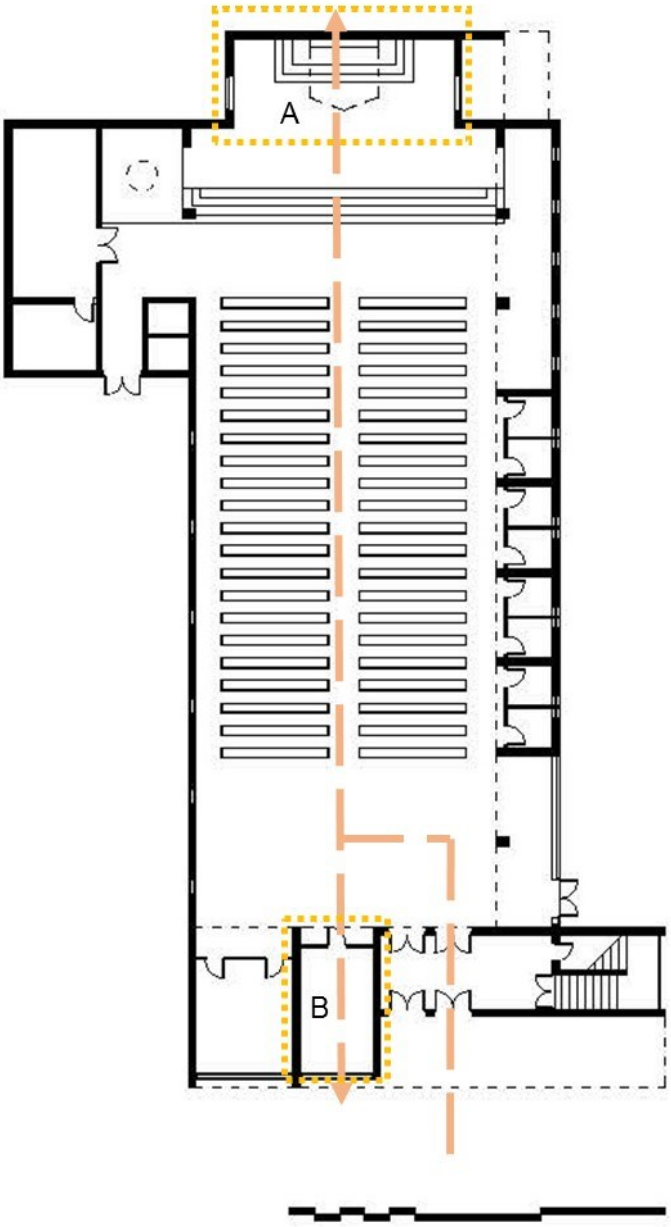
Fig. 37 (Above right) Single axis: St. Kessog's, Balloch (1957), Gillespie, Kidd & Coia: Ground floor plan



A: sanctuary

B: canopied entrance

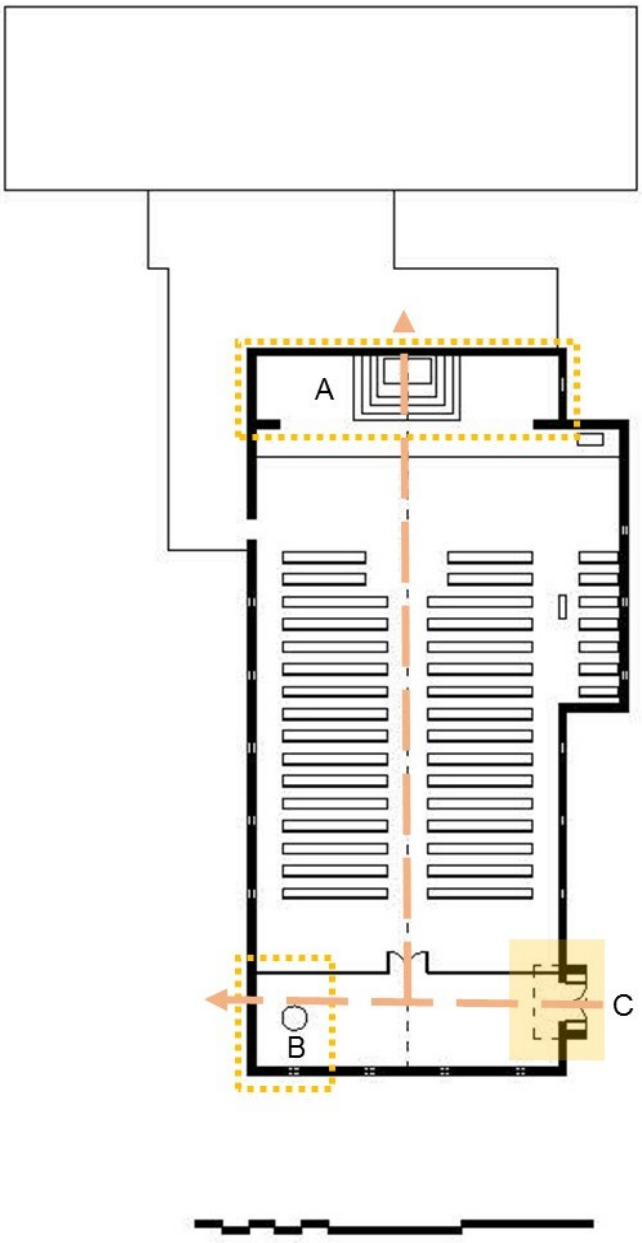
Fig. 38 Multiple axes: St. Maria Goretti, Cranhill (1955), Gillespie, Kidd & Coia (author): Ground floor plan



A: sanctuary

B: baptistery

Fig. 39 Multiple axes: St. Michaels, Dumbarton (1952-4), Gillespie, Kidd & Coia: Ground floor plan

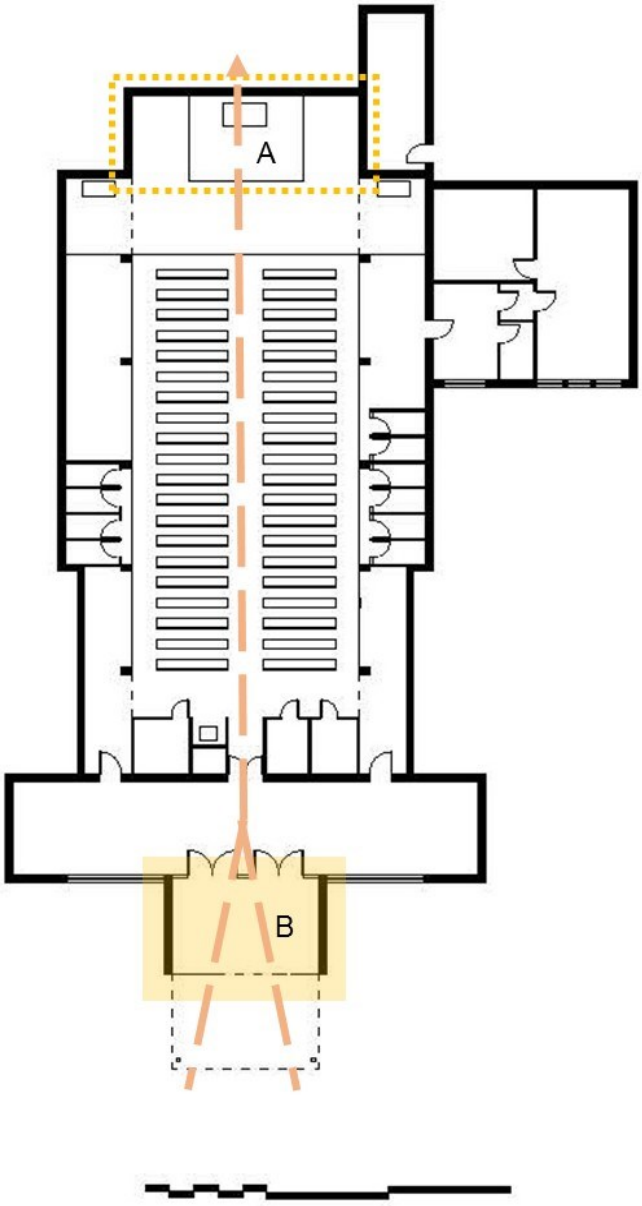


A: sanctuary

B: baptistery

C: campanile entrance

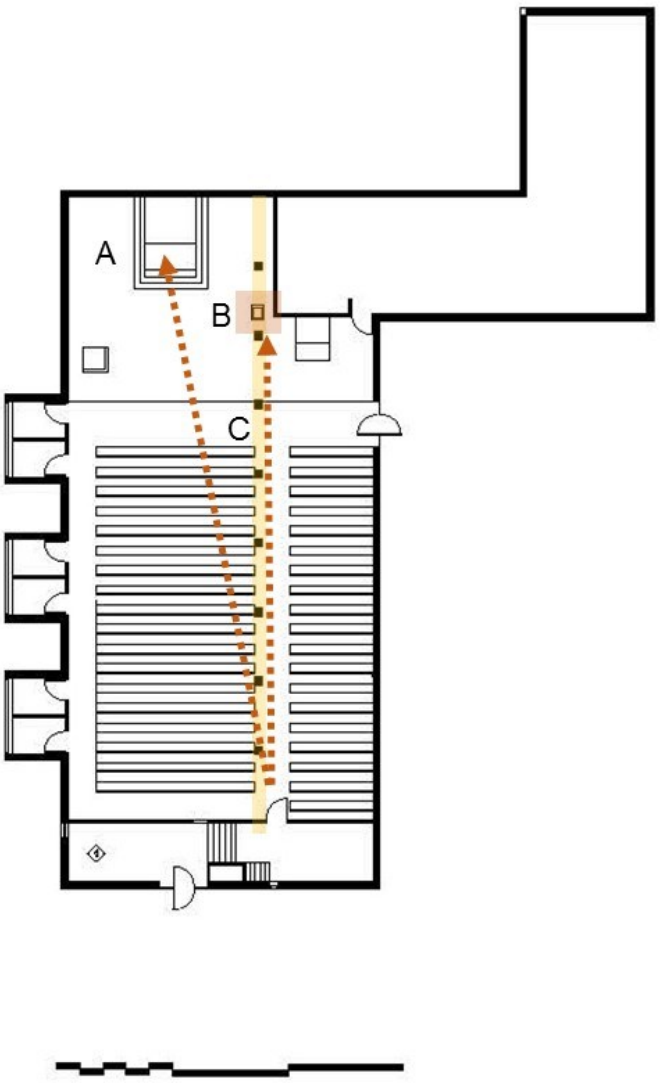
Fig. 40 Entrance through campanile: St. Joachim's, Carmyle (1956), Gillespie, Kidd & Coia: Ground floor plan



A: sanctuary

B: campanile entrance

Fig. 41 Entrance through campanile: St. Paul the Apostle, Shettleston (1959), Gillespie, Kidd & Coia: Ground floor plan



A: altar

B: tabernacle

C: dividing structure

Fig 42. Asymmetrical axis: St. Mary of the Angels, Camelon (1960-1), Gillespie, Kidd & Coia: Ground floor plan

Architectural promenade plan types

The theory of the *promenade architecturale* in Gillespie, Kidd & Coia's post-1956 churches is well documented.[278] Benson and Baines assert that the most significant examples of this are found at St. Paul's, Genrothes, St. Bride's, East Kilbride, St. Patrick's, St. Joseph's,[279] and Our Lady of Good Counsel, Dennistoun.[280] However, it could be argued that St. Martin's, Castlemilk, St. Mary's, Borrowstouness, and St. Benedict's, Drumchapel exploit the experience too.

In this approach, St. Paul's, Glenrothes (fig. 43) could be said to develop the experience of an ensemble of buildings first seen at Holy Family, consciously incorporating them into the processional route towards the altar. The route incorporates a number of changes of direction, first passing an unbuilt cylindrical hall before passing the presbytery, turning into a lobby and turning again into the church. A glazed walkway connects church to presbytery, a feature also used at St. Mary's, Borrowstouness (fig. 44), and the area beyond the off-centre entrance to the church has the simplest separation from the main liturgical space in the form of two adjacent partitions. Celebrants are both denied a direct view of the altar yet are offered glimpses of the space indirectly before finally passing between the confessionals - as encountered at St. Matthew's, Bishopbriggs - and seeing the altar head-on. Beyond, a broad space emphasises a sense of reverse perspective with the angled walls diverging as they reach the sanctuary. The architectural promenade would be revisited several times after St. Paul's, Glenrothes, notably at St. Martin's, Castlemilk (fig. 45), St. Bride's, East Kilbride (fig. 46), and Our Lady of Good Counsel (fig. 46). At these churches, the varied route was to some extent unencumbered by the peripheral form of their footprint. This included forms such as the truncated wedge layout of St. Paul's, Glenrothes, St. Martin's, Castlemilk, and St. Mary's, Borrowstouness, the more informal wedge form of Our Lady of Good Counsel, orthogonal box-like layouts such as St. Bride's, and the irregular polygonal footprint of St. Benedict's, Drumchapel. These tended to be driven by a range of factors such as the relationship of the congregation size to the proximity of the altar in the case of the truncated wedges, or an integrated approach to structure and lighting such as at Our Lady of Good Counsel.

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[278] Baines, M. (2007) 'Themes and variations.' *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987.* Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City, pp. 52-5.

[279] Ibid., p.52.

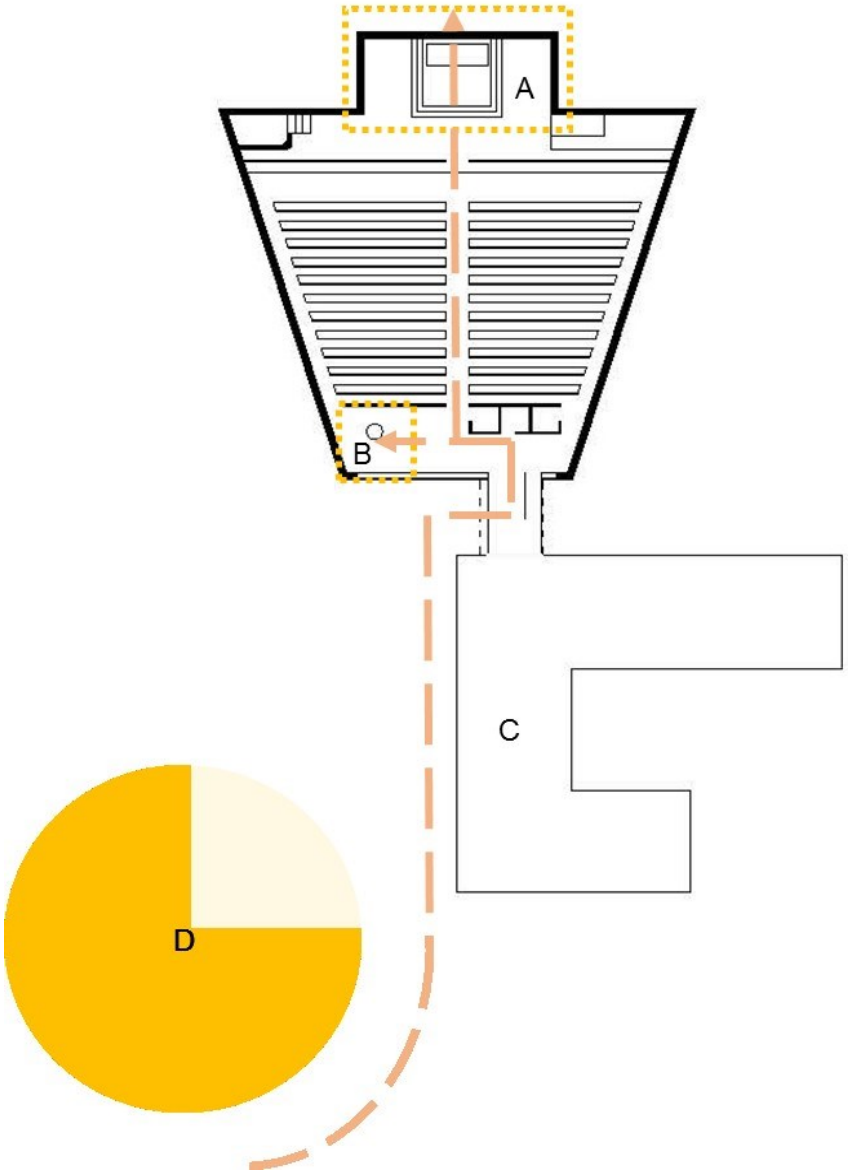
[280] Benson, G. (2007) 'Sources, ideas and lessons.' *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987.* Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City, p.44.

Approach to the entrance to St.Martin's, Castlemilk is underneath a concrete terraced area, and entrance into the building is consequently via a concealed, darkened transitional zone. Turning into the church itself, the space fans out into a wider sanctuary end to the south. The church is a larger building than St. Paul's, Glenrothes, designed to seat around 600 people. Entry to St. Martin's is again off-centre, just to the east of the central axis.

St. Mary's, Borrowstouness, was also designed with an entrance out of alignment with the principal central axis of the short aisle within. Instead the entrance is on an alternative axis with the baptistery, which was conceived as a small, semi-independent space terminating in a hemispherical wall. Although the entrances to these churches do not align with the axis of the central aisle, in contrast to St. Mary of the Angels, the fundamental layout of these three wedge-shaped churches is symmetrical.

The form of the wedge-shaped plan of St. Mary's, Borrowstouness was articulated by its semi-autonomous baptistery. However, this church does not include a presbytery as part of the architectural composition. Smaller than St. Martin's, it is also the most pronounced of the wedge model, a much more acutely angled design which would have placed even more of the congregation at the sanctuary end of the building than the other examples of this model.[281] The roof of the glazed link that connects St. Mary's baptistery with the church continues into the church itself and forms the floor of the gallery, which would have surmounted the confessionals and other, ancillary accommodation. There was no narthex as such, but instead the glazed link becomes the transitional space before entering the main liturgical area. Confessionals here, as at St. Paul's, Glenrothes and St Martin's, Castlemilk, were placed near to the entrance rather than along the side walls of the nave.

[281] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p. 75.



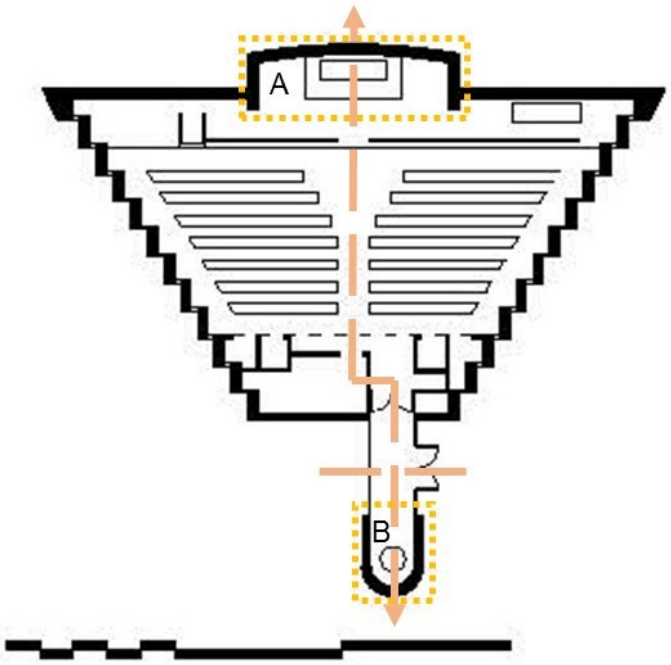
A: sanctuary

B: baptistery

C: presbytery

D: unbuilt hall

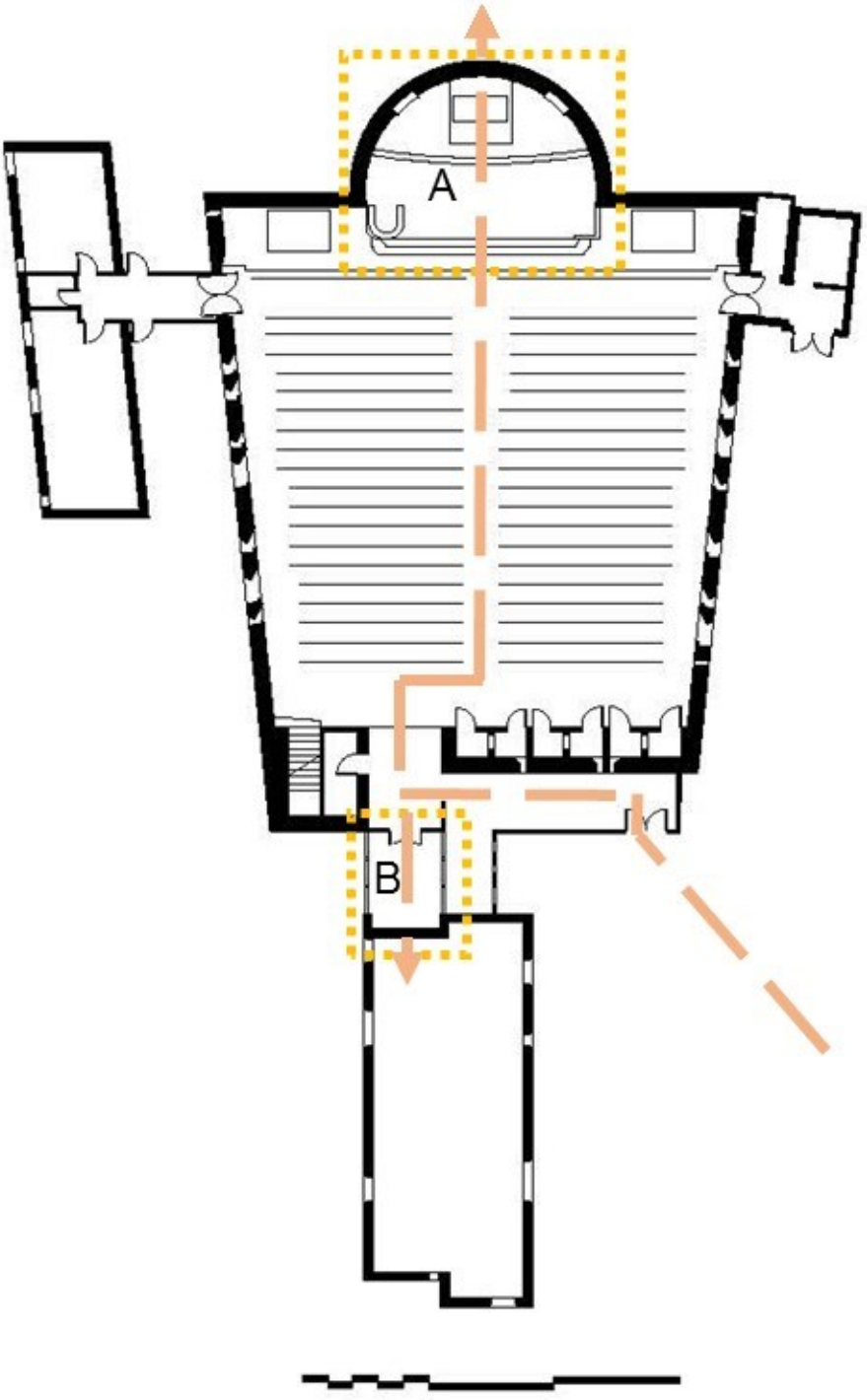
Fig. 43 Architectural promenade at St. Paul's, Glenrothes (1956-7), Gillespie, Kidd & Coia: Ground floor plan



A: sanctuary

B: baptistery

Fig. 44 Architectural promenade at St. Mary's, Borrowstouness (1962), Gillespie, Kidd & Coia: Ground floor plan



A: sanctuary

B: baptistery

Fig. 45 Architectural promenade at St. Martin's, Castlemilk (1961), Gillespie, Kidd & Coia: Ground floor plan

St. Bride's, East Kilbride is one of the largest of the architectural promenade narrative. Originally, visitors would have entered the domain of the church by a flight of steps passing between the presbytery and the 27m high campanile.[282]At the top of the steps, a paved courtyard referred to as a 'piazza' by Rogerson,[283] with a radial design converging on the main entrance to the church, creates a sense of enclosure before entering the church. The lateral entry into the building existed in previous basilican plan types, but St. Bride's engenders a sense of anticipation by a series of deliberate spatial manipulations and manoeuvres. This suggests a development of the approach to Holy Family across a precinct, but the St. Bride's design is more theatrical. The narthex receives the visitor, but it is a space of orientation. The gallery is to the east of the narthex, where it occupies virtually the entire length of the building from north to south. Directly ahead, the baptismal font occupies a space defined only by a change in level with the north-west corner of the building. Continuing under the gallery, the confessionals are conspicuously placed in front of the visitor and their position between the entrance to the building and the western portion of the building housing the nave and sanctuary, imply a barrier despite access to the pews being possible around them and between the first two and subsequent four. Turning right and facing south, the sanctuary at the south end becomes visible. Continuing, a curved staircase giving access to the gallery above, disappears into a fold in the brick wall to the west, and south of this are the Mortuary Chapel, Lady Altar, and access to the sacristy. By this point of the spatial experience, the main liturgical space has become visible and accessible through the vertical supports of the gallery. Descending the two steps into the nave, pews are arranged asymmetrically and unevenly, with those to the east of the aisle being longer than those to the west. Although the main north-south aisle is on axis with the high altar, the altar itself is eccentric to both the width of the nave and to the width of the church overall. A transverse axis incorporates an east-west aisle with the gap in the arrangement of confessionals and entrance. This secondary axis does not so much terminate as change direction, colliding with the east wall and folding upwards and dissolving into a strategically placed 'light chimney'.[284] The church provoked lively debate after opening, and although certain aspects of its layout, such as the gallery,

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[282] The campanile no longer exists - it as demolished in 1983 due to 'defective' brickwork
See RCAHMS (2017) *East Kilbride, Whitemoss Avenue, St. Bride's Roman Catholic Church.* [Online] [Accessed on 26th January 2014]

[283] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p. 77.

[284] Rodger, J. (2007) 'Towards the MacMillan and Metzstein years.' *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987.* Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City, p. 43.

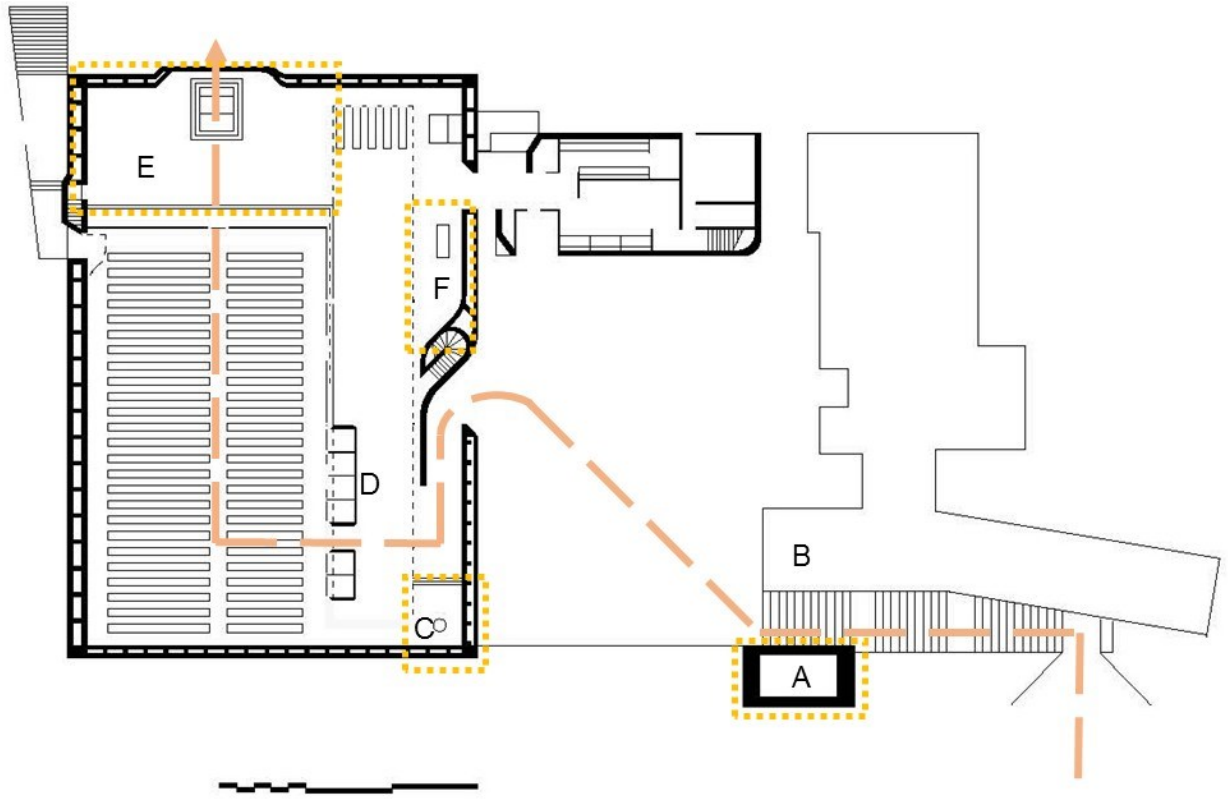
were questioned, in its layout, a certain looseness of plan had achieved 'complete unity between sanctuary and nave', at a time of liturgical transition.[285]

Continuing this series of highly experiential sequentially spaced building narratives is St. Patrick's, Kilsyth. Both St. Patrick's and St. Bride's create an increase in anticipation, but this is created at St. Bride's by the manipulation of the visitor substantially on one level, whereas at St. Patrick's this is achieved by incorporating level changes resulting from its sloping site. Both employ a sense of implied (rather than physical) separation between nave and peripheral functions, which at St. Patrick's are again contained within a narrow oblong portion of the building along the entrance facade. There is a complicated sense of discovery internally after a convoluted arrival, which is sharply contrasted by the vast orthogonal nave. The visitor enters above the level of the main liturgical space and takes a pathway to it via the baptistery at the north-west corner of the building, or alternatively emerges close to the sanctuary. As the building faces onto courtyards at both the front and back, an alternative entrance allows access straight into the back of the nave from the south-west wall. The nave again comprises an eccentric axis to the high altar, creating unequal areas of seating on either side of the single aisle. Ambulatory space encircles the nave, permitting lateral access on both sides and allowing entry to the confessionals, which adopt the earlier, more discreet position adjacent to the nave, but here are conceived as pockets of space within a deep external wall.

In another example, Our Lady of Good Counsel, Dennistoun, evokes a sense of discovery predominantly centred on the interior. The whole of the east side is grounded on a plinth of shallow steps. At the north end, these rise externally to a secondary entrance and extend along the low east wall as well as on direct axis with the entrance in a quasi-pyramidal fashion. At the opposite end of the wall, a more discreet entrance contrasts completely with the first. This is the main entrance so much as it is the beginning of an experience. Entry is via two sets of double doors penetrating the south end of the east wall, and beyond, the interior is revealed only gradually due to the presence of a wall adjacent to a staircase ascending into the main space. The next step in the sequence is the baptistery with its font on axis with the entrance steps. Arrival is therefore within the ancillary portion of spaces to the west side of the building, described logically by a lower roof structure above. Other accommodation within this secondary zone consists of the sacristies, confessionals and side chapel. The plan form is a loose wedge-shape, again with the sanctuary in the widest end. Unlike the firm's previous wedge-shaped churches,

[285] Nuttgens, P. (1966) 'St. Bride's: an appraisal.' *RIBA Journal,* 73 (4), pp. 170-9. Nuttgens questioned the gallery for having an 'undefined' purpose.

however, Our Lady of Good Counsel incorporates the sanctuary within the peripheral outline of the building. In conjunction with this, lighting also becomes more integrated within its envelope. A broad ambulatory space allows access to the seating, laid out in forward-facing banks of pews on either side of an aisle on axis with the altar. Blocks of seating are wider on the east side, and a further area of seating faces the sanctuary from the east wall, conforming to the wide north end of the building and altering the axial nature of its layout.



A: campanile

B: presbytery

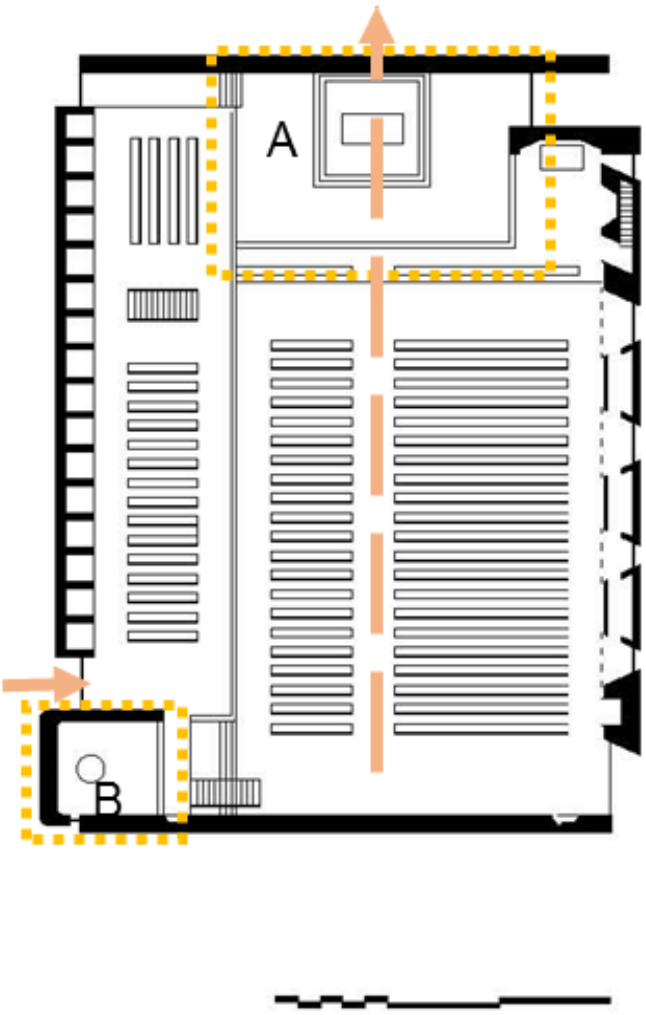
C: baptistery

D: confessionals

E: sanctuary

F: mortuary chapel

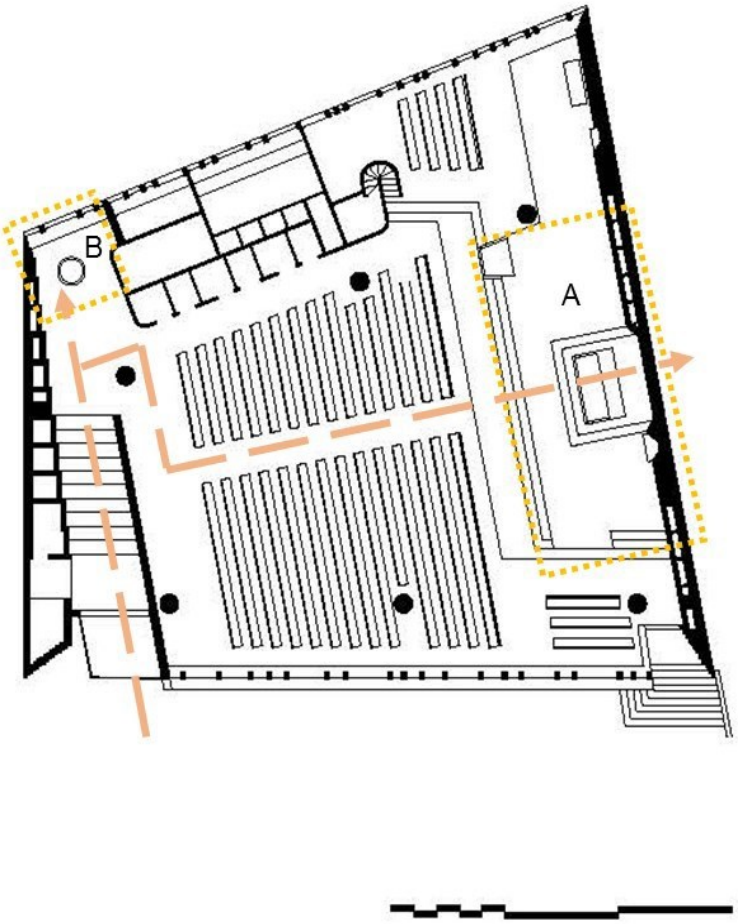
Fig. 46 Architectural promenade at St. Bride's, East Kilbride (1963-4), Gillespie, Kidd & Coia: Ground floor plan



A: sanctuary

B: baptistery

Fig. 47 Architectural promenade at St. Patrick's, Kilsyth (1964), Gillespie, Kidd & Coia: Lower Ground floor plan



A:sanctuary

B: baptistery

Fig. 48 Architectural promenade at Our Lady of Good Counsel, Dennistoun (1965), Gillespie, Kidd & Coia: Ground floor plan

Centralised plan types

In the early-mid 1960s, although plan types varied between those that followed an extended form of architectural promenade, which included external and internal spatial sequencing, the idea of external concealment of programme - and structure - was a theme that characterised some of Gillespie, Kidd & Coia's centrally planned schemes too. Examples include St. Joseph's, Faifley, and Sacred Heart, Cumbernauld.

Had it survived, the original St. Joseph's, Faifley (fig. 49), would have been the first significant example of Gillespie, Kidd & Coia's ecclesiastical work of a multi-directional

layout. The church formed the focus of a small complex of associated buildings around a courtyard on a large green site. This church too employs a ‘piazza’ area in the space between it, the church hall and presbytery, forming a paved ante-space on the approach to the entrance. The use of ceremonial external space has been noted in the more recent churches of St. Bride’s and St. Patrick’s, as well as in the earlier examples of the church of St. Charles, Kelvinside, Holy Family, Greenock, and St. Joseph’s, Greenock, where a degree of abstraction of the different programmatic elements create interesting external space.

St. Joseph’s, Faifley, was organised around a square plan. Ascending a short flight of steps and passing through a narthex positioned between the baptistery and Lady Chapel, the visitor would have entered the church on a significantly off-centre axis. This allowed for a smaller square of orientational space in the southern corner of the building. From here the space rose up to the baptistery to the south, to a row of three confessionals against the south-west wall, a rear axis connecting to a secondary entrance on the north-east wall, and north-west down the principal axis and main processional aisle. The sanctuary, rather than acting as a focus to the principal axis, was the focus of the space as a whole, taking an almost central position within the square. Three banks of pews addressed the square-form sanctuary on three sides. The liturgical focus of the building was defined only by a simple square dais and square baldacchino simply suspended from the angled timber roof beams. Behind the sanctuary the narrow oblong sacristy inhabited the length of the north-west wall, defined only by a wall between it and the church. On the sacristy wall, on axis with the sanctuary, was a large niche with angled sides and a rear wall parallel to the sanctuary. Rather like a vestigial apse, the niche gives some focus to what would otherwise be an entirely blank rear wall. Although this entire arrangement would have made perfect sense from the church side of the sacristy, within the sacristy itself the pinching of space in the middle of an already narrow room seems a little unsatisfactory. On the north-east wall a further confessional was tucked into a space beside the secondary entrance, indicating no particular hierarchy within the building, and their discreet lateral placement lacked the confrontational quality of those of St. Bride’s. The sunken Lady Chapel was quite beautifully expressed in its subordination to the main church space, being lower both at floor and roof level. By contrast, the baptistery is ascended from the floor level of the church.

Sacred Heart, Cumbernauld (fig. 50), is orientated north-south with the principal axis on the diagonal of what is effectively a large, more or less squarely-planned building. Entry is via the north end, which is chamfered from the main square form of the church. It has no particularly dignified approach, the entrance addressing a car park to the north-west, and

an open green area to the north-east. Ambiguous or indeed absent, is any notion of any revelatory exterior promenade. The peripheral liturgical and ancillary accommodation including Lady Chapel, baptistery, sacristy, office, shop and hall is grouped to the south-west, and a large two-storey presbytery extends to the north-west, beyond the north-west facade of the main church building. Entering at the angled north corner, the narthex is reduced to a small transitional space enveloped by a timber screen. Passing through this the visitor is on a diagonal axis with the sanctuary, around which seating is arranged in four sections, addressing the altar in the south corner.

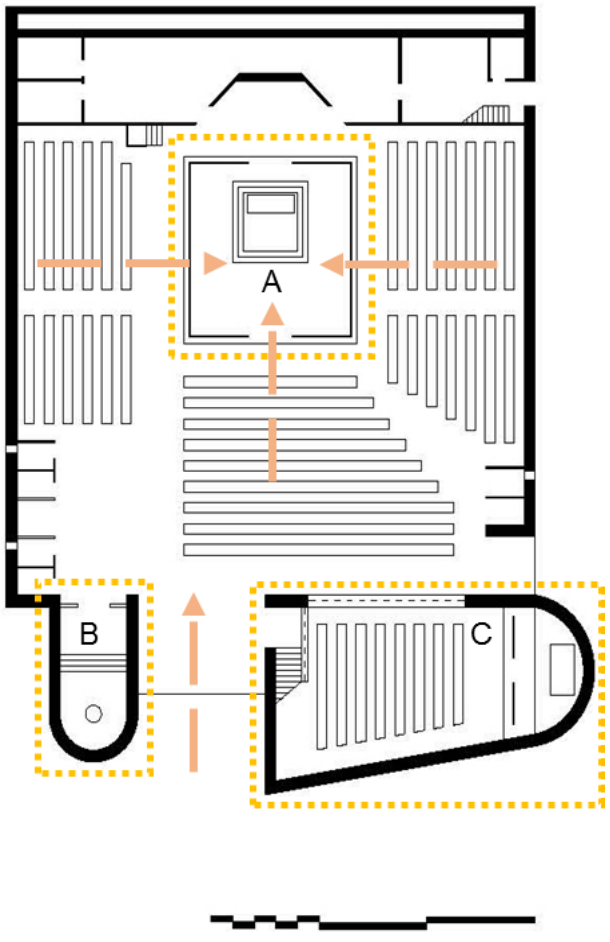
St. Benedict's, Easterhouse (fig. 51) extends the centralising purity of layout begun at St. Joseph's, Faifley, here achieved by the relatively few constraints of site and resulting building form. In contrast to previous churches which were based on a build-up of anticipation generated from the architectural promenade, beyond the entrance vestibule of this rectangular church, the visitor has a full view of the main internal space, albeit an oblique one due to the eccentricity of the entrance. On either side of the entrance, peripheral accommodation is housed, again, within structures subordinate to the main volume.

St. Benedict's, Drumchapel (fig. 52), demolished in 1991, combined the programmatic theme of centralisation with the exploration of light through the building's cross-section. The distorted octagonal form of the church was not one that the firm had used previously, and coupled with the unconventional building section, makes it distinctive amongst the later work of Gillespie, Kidd & Coia. Approaching the church from the road the visitor would have encountered a cluster of architectural elements; a hall and presbytery both attached to the church in between. The regularity of the hall and presbytery were offset by the disorientating angularity of the church itself.

St. Margaret's, Clydebank was built almost a decade after the Second Vatican Council had convened - long enough for its impact to be felt in its design from the start, particularly in the omission of elements such as altar rails. As part of the entrance strategy, a single storey glazed wall adjoins the presbytery at right angles, evolving into an external solid retaining wall that extends to the site entrance, creating a protected gathering space at the threshold to the church. Although centralised, the church is arranged such that the sanctuary occupies space in the corner of an effectively square building. Internally the broad, single-space nave uses the square footprint to focus on the sanctuary by arranging the congregation such that one bank of seating aligns with the north-west wall and another with the north-east. The central bank of seating is organised around a diagonal

axis that terminates at the sanctuary, which itself occupies the eastern point of the building.

The final parish church that Gillespie, Kidd & Coia undertook was for the Lutheran Church. St. Columba's, East Kilbride is centralised inasmuch as it houses two arms of seating in an 'L'-shaped arrangement with the altar at their intersection. This layout is unique in Gillespie, Kidd & Coia's work, however its highly formalised plan commands total focus on the altar, and precludes any possibility of interaction between the two segregated sections of its congregation.

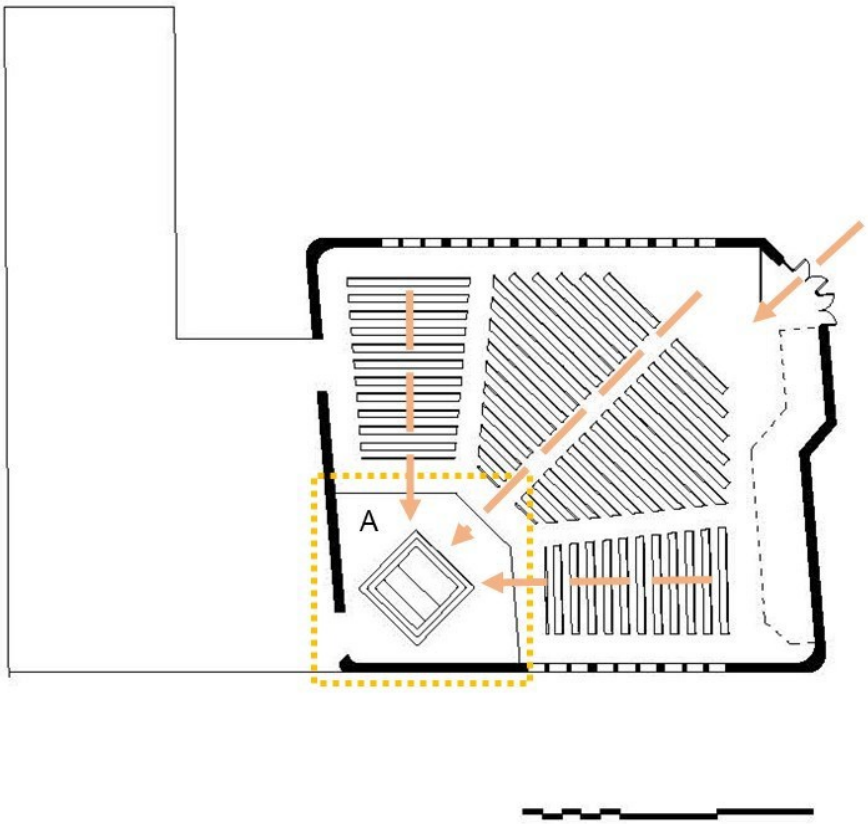


A: sanctuary

B: baptistery

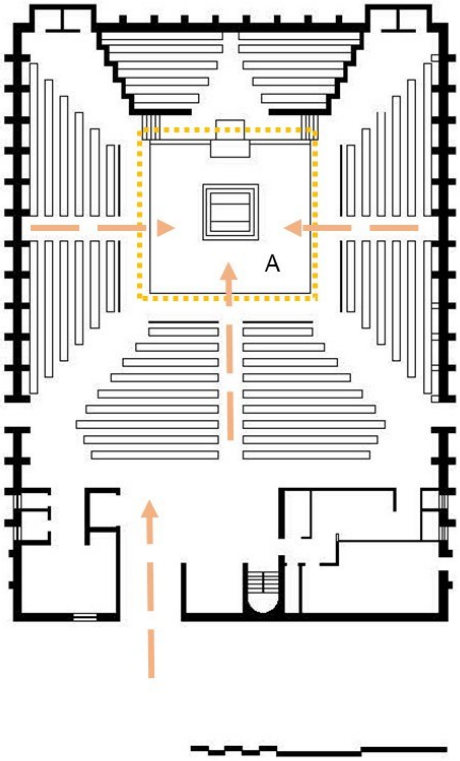
C: Lady Chapel

Fig. 49 Centralised layout at St. Joseph's, Faifley (1964), Gillespie, Kidd & Coia: Ground floor plan



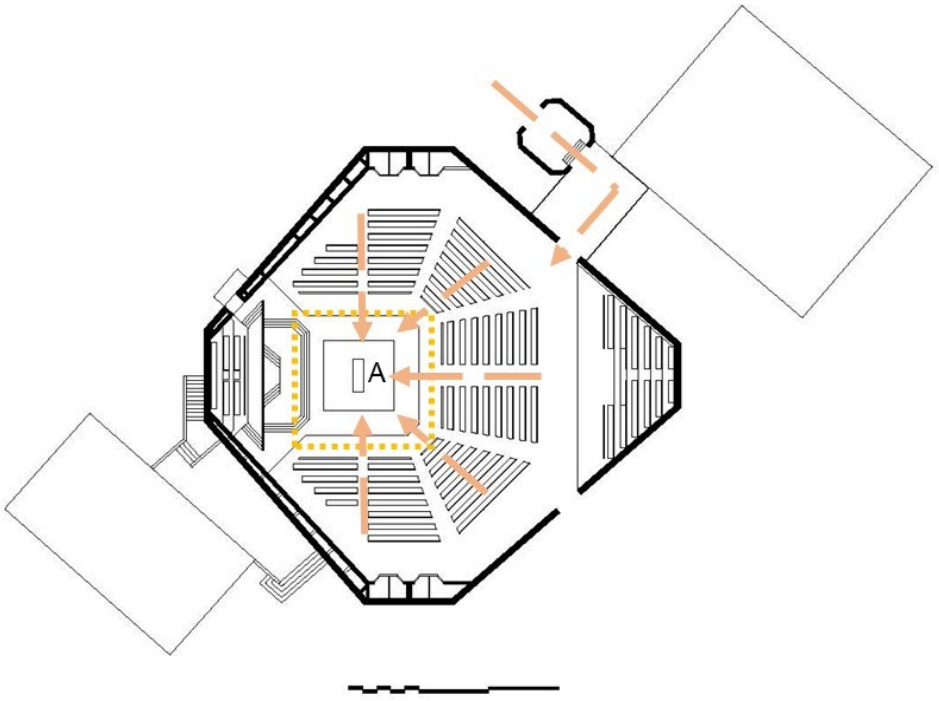
A: sanctuary

Fig. 50 Centralised layout at Sacred Heart, Cumbernauld(1964), Gillespie, Kidd & Coia: Ground floor plan



A: sanctuary

Fig. 51 Centralised layout at St. Benedict's, Easterhouse (1965), Gillespie, Kidd & Coia (author): Ground floor plan



A: sanctuary

Fig. 52 Centralised layout at St. Benedict's, Drumchapel (1965-7), Gillespie, Kidd & Coia : Ground floor plan

Conclusion

The varied plan types reflect a shift in the perceived role of the laity in the liturgy over time. While still a product of the linear hierarchy of the traditional Mass, the churches designed in the 1930s are situated within the context of gradual liturgical reform. This favoured wider congregational participation and reflected the papal recommendations concerning the reduction of side-aisles, situation of choir galleries to increase visual connection with the altar, reduction of depth and increase in width of the sanctuary.

The singularity of footprint found at St. Patrick's and St. Columba's demonstrates the most basic spatial organisation with which to achieve these aims of liturgical legibility. However, Gillespie, Kidd & Coia had already demonstrated through its earliest design of St. Anne's, and after at St. Columbkille's, certain features approaching centrality. In the 1950s, the alternative positioning of main entrances to otherwise axial layouts began to break away from the traditional plan form into a plurality of approaches, with more didactic inflections, for example in the symbolic 'journey' to and within St. Bride's. The traditional uni-directional seating arrangement was retained in these, however. Plan types that effectively incorporated sanctuary and nave, such as St. Bride's and the unified spaces of churches that followed, represent changing liturgical ideas before the end of the Second Vatican council. The centralised examples eschewed architectural promenade, instead combining an inclusively positioned laity with the straightforward hierarchy of the firm's first axial basilicas.

2.4 Section: Light

Natural lighting in churches is related to both to the dual effect of the building's cross-sectional structure and to the control of spatial experience. For example, in an article for *Architectural Heritage*, John Sanders recalls Peter Paul Pugin's idea to increase the quantity of light entering the church of St. Patrick, North Street, Glasgow, by reducing the amount of arcaded structure in his scheme – a solution for an inner-city church thirsty for light, driven by contextual necessity.[286]

Historically, however, the lateral clerestorey lighting of the Early Christian basilicas or relatively small apertures of heavy Romanesque churches were functional, but the

[286] Sanders, J. (1997) 'Pugin and the diocese of Glasgow.' *Architectural heritage,* 8, pp. 89-107.

resulting semi-obscurity left a tangible medium upon which incense smoke could be mysteriously etched, or through which shafts of sunlight could penetrate. In the stained glass of skeletal Gothic cathedrals and 'divine' high-level light of both Byzantine and Baroque domes, light became fundamentally narrative rather than simply functional.

In Gillespie, Kidd & Coia's churches, while always linked to a building's ambience, there is a large degree of variation in light sources. This ranges from the more general lateral space lighting of the longitudinal churches such as St. Anne's, to experimentally driven directional and diffuse lighting appearing in the late 1930s and extending to the final parish church commission in the late 1970s, frequently from above. In virtually all of Gillespie, Kidd & Coia's churches, the medium of light is treated with immeasurable importance – whether diminished, banished, filtered or concentrated for narrative effect.

Generally illuminated naves

The longitudinally planned churches designed in the 1930s tended to be designed with relatively consistent natural lighting levels, illuminating the nave from the long side walls. At this stage, Gillespie, Kidd & Coia used two main methods of achieving this; through a single tier of lateral glazing with the use of dormers, as at St. Anne's and St. Patrick's, or by a more traditional basilican model employing low level glazing and separate, higher level clerestorey glazing as at St. Columbkille's, St. Columba's and St. Peter in Chains. Both variations are a function of the cross-section of the building.

Sectionally-driven lighting at St. Anne's (fig. 53) provides general ambient lighting to the main volume of the building via large, vertically-orientated dormer windows. The interaction of their rounded heads with the descending planes of the mansard roof is notable, with short lateral barrel vaults curving inwards to meet the main barrel vault of the nave. At its lowest point, the roof reaches one storey in height, necessitating shorter windows at this point. Despite the original, unexecuted intention of applying gold leaf to the ceiling,[287] natural light still has a strong effect on its sense of plasticity. Further lighting effects are created such as the subtle delineation of the groin vault at the intersection of nave and transepts. The use of laterally positioned dormer windows at St. Patrick's is also expressed according to the mansard profiled roof and assumes great importance because they are the primary means of naturally lighting both nave and sanctuary.

[287] Baxter, A. (1994) 'Early Coia buildings.' *Mac Journal*, 1, p 16.

The traditional basilican building sections of St. Columbkille's and St. Columba's are characterised by round-arched lancet windows in the side-aisles and clerestoreys; a single clerestorey window and two side-aisle windows per structural bay at St. Columbkille's and five clerestorey windows and one side-aisle window per bay at St. Columba's. The baptistery transept at St. Columbkille's has full height narrow vertical glazing on each angle of the structural bay. Clerestorey lighting combines with the structural expression of each building resulting in a heavy, flat-ceilinged volume emphasising nave and sanctuary at St. Columbkille's, and an upwardly extended volume created by the Gothic rib structure at St.Columba's.

The interior of St. Peter in Chains is illuminated both by wide rectangular leaded windows, filling the bays between the vertical structure at the level of the side-aisles yet above, the fenestration is not quite as it seems. Externally, high-level windows are expressed as clerestorey windows. These are set in a similar way to those in the side-aisle walls, within the structural bays. Inside however, due to the angled vault of the ceiling springing from a point immediately below the level of the bottom of the windows, they appear as wide rectangular dormers. The filling of the structural bays with glazing occurred at St. Peter in Chains and St. Columba's before it was subsequently continued in the firm's post-war work. This placed an emphasis on structure, which was exposed and illuminated by glazing.

General ambient levels of illumination to the nave continued after the Second World War, where on the lateral walls of St. Joseph's, Greenock, simple oblong apertures modulate the largely unadorned exterior and are suggestive of the structural modulation within. A similar approach can be seen in the basilican models of the early 1950s, such as St. Matthew's, Bishopbriggs, where the nave is very light as it is neither wide, nor does it possess side-aisles. In addition, its rectilinear volume is simply and directly focused on the sanctuary, with its low, flat ceiling intensifying this dominant axial characteristic. St. Kessog's, Balloch has a similar lighting arrangement, but the ceiling is gently curved, in opposition to the rigid flatness of St. Matthew's.

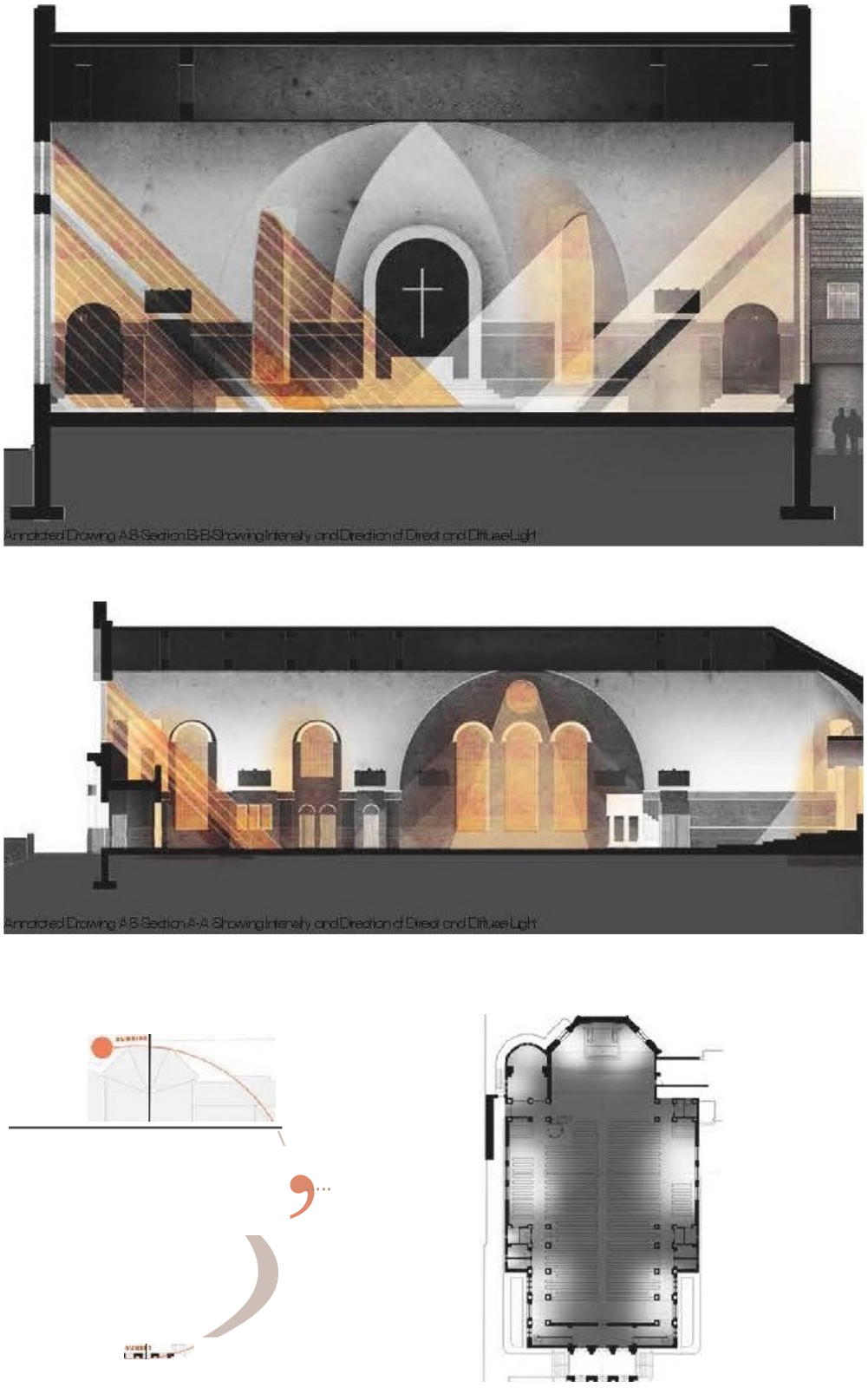


Fig. 53 Building sections and diagrammatic plans showing general illumination at St. Anne's, Dennistoun (1931-3), Gillespie, Kidd & Coia

Dramatically illuminated naves

The rendering of structure visible in light, seen previously at St. Peter in Chains, Ardrossan, and St. Columba's, Woodside, correlates with the treatment of light at Holy Family. The first and last structural bays of the north side of the church are occupied by full-height, as well as full-width, glazing. High-level clerestorey glazing punctuates both the long elevations to the north and south. It occupies the entire width of the structural bays and emphasises that the brickwork panels between the structural frames are only infill. However, lighting levels in the nave are relatively low due to the church's predominantly high-level glazing. A number of other churches explore this more dramatic use of nave lighting including those that experimented with punched geometric apertures such as the triangular clerestorey glazing of St. Laurence's, Greenock, the series of nine sets of high rhomboidal windows - each representing a structural bay - at St. Michael's, Dumbarton, and the rectangles, rhomboids and split hexagons of St. Joachim's, Carmyle. At St. Maria Goretti, Cranhill, a combination of punched rectangular windows and continuous clerestorey glazing - on opposite sides - speak of different characteristics within the same building - the smaller apertures aligning with the privacy of the confessionals and the strip glazing on the lighter more public side relating to the structure within. It also contributes further to the abstract, carved quality of the building, forming a slot between - and effectively articulating - the top of the brick wall and roof.

At the church of St. Charles, Kelvinside, the relationship of structure, infill, and the glazed gaps in between creates a rich and dramatic ambience of intense light and deep shade with cast shadows that enliven the sheer planes of brickwork. Large panels of clear glazing take the place of transepts, surmounting a horizontal ring-beam, which terminates at the curved brick walls of the apse. Here the glazing is defined by slim concrete transoms, dividing the panel into four tranches of glazing, each of which is then subdivided vertically by even slimmer concrete mullions. The entire periphery of the church at clerestorey level is glazed above the level of brick infill walls and separated into bays by virtue of the vertical columnar structure. Each bay of glazing in angled at the top to take account of the concrete roof, itself angled into triangular sections over the entire area of the roof.

The fenestration at St. Mary of the Angels, Camelon is a function of its relationship with the building's brickwork skin. It is not treated as a defining envelope, but more abstractly as the outermost screen of a build-up of wall, which allows the physical properties of the bricks to determine the extent of panels of solid brickwork and areas of glazing. Directly

above the main entrance narrow horizontal glazing cuts into the brickwork skin, asymmetrically extending westwards along the facade and stopping to emphasise the thickness of the east wall. At the interface of the taller and lower volumes, an ‘L’ shaped window defines the two parts of the building. Its horizontal element extends westwards, acting in dynamic opposition to the fenestration above the main entrance. Clerestorey glazing is absent on the front facade, but the blank clerestorey level sits lightly and slightly recessed at the top of the brickwork. Above that a triangular ’light cannon’, orientated west, illuminates the gallery below. The blind brick wall of the side-chapel is offset by highly animated clerestorey glazing - a single horizontal band for the side chapel and a much greater amount in the nave wall. A similarly narrow horizontal ribbon of clerestorey glazing tops the nave wall, stretching the entire length of the facade. Below, further glazing extends down to the level of the side chapel roof. An apparent arbitrariness of division of the panes lends a certain dynamism to an otherwise plain facade. At the north end the brick wall of the front elevation wraps round to define the gallery, allowing legibility between it and the nave glazing. Above this, the glazed face of the light cannon, with offset metal cross in front, marks the threshold to the church.

A variation of the more dramatic form of illumination - or even deliberate obscurity - occurs in those churches whose plans differ from those of the longitudinal basilica. This is seen very obviously at St. Paul’s, Glenrothes, where the majority of the church, including the nave, is contained within a solid, blind brick envelope. The only illumination is from the west, on the fully glazed entrance front and glazed west-facing elevation of the lantern above the sanctuary. St. Mary’s, Borrowstouness retained something of the fenestration type of St. Martin’s, Castlemilk, and St. Mary of the Angels but there was much less of it. A narrow vertical slot appeared as a gash in the masonry, which obliterated the parapet wall and lit the gallery inside. Further down, a horizontal slot window with a short vertical stub off-centre to the main horizontal opening, seemed to point towards the glazed entrance. However, the sharply angled sides of the church are the most important feature in its dramatic lighting. Whereas previously at St. Martin’s there had been a variety of windows that had been angled to train light onto the altar, at St. Mary’s this developed into a series of eleven completely detached white rendered piers, orthogonal to both the entrance facade and to the sanctuary façade. In between each one a narrow floor to ceiling sliver of glazing allowed unidirectional light to fall onto the wide end of the church and hence onto the sanctuary and altar. This use of stepped orthogonal piers interspersed with glazing had been used previously by Barry Byrne at the church of Christ the King, Turner’s Cross, Cork, in 1927, so was not wholly new but neither had it been widely seen in ecclesiastical design.

Top lighting

While the method of top lighting was widely used in the firm's repertoire from the Roman Catholic Pavilion, it was frequently combined with other forms of directional lighting. However, a number of the later churches, for example St. Bride's, East Kilbride, St. Benedict's, Drumchapel, St. Margaret's, Clydebank, St. Columba's, East Kilbride, and the oratory at the Archbishop's house, used the top-lit method exclusively.

The boardroom of SCIAF (Scottish Catholic International Aid Fund) at 19 Park Circus (fig. 54) is now a light space used for meetings and occasional worship, with two windows on one side of the room and one on the opposing wall. These windows were reinstated by SCIAF, the original apertures having previously been blocked up. Gillespie, Kidd & Coia converted the space – a large rectangular outrigger at the rear of the building - into an oratory, from its previous use as a nursing home. Reputedly the room had been used as an operating theatre, using the large circular oculus in the roof for top-lighting. It is unclear whether Gillespie, Kidd & Coia filled in the side windows, or whether the configuration was inherited. Nevertheless the architects' decision to retain this was significant as the concept of a top-lit chapel with otherwise no other significant source of natural light created a very dramatically illuminated liturgical space. The position of the oculus demarcates the sanctuary area from the rest of the room, but lies just before the altar itself.

Little of the lighting strategy at St. Bride's is revealed externally, but inside, the great east wall is perforated by a constellation of variously-dimensioned orthogonal apertures; some simply acting as recesses and others as light chimneys which allow light to cascade down into the interior at different levels, from openings at parapet level. The cills of these openings are canted as if to allow the light to literally spill into the church. These are, in effect, the windows, but with only indirect illumination. No other walls possess apertures, with the only other means of illumination being from above, where light filters through a timber lattice ceiling structure from west-facing glazing in the roof trusses above and east and west-facing light cannons. The importance of the relationship of the roof structure to the lighting concept of St. Bride's was underlined through criticism received for the amount of structure visible from below.[288] This was avoided at St. Benedict's, Drumchapel, by a more daring and original sectional concept that allowed the sweeping curve of the lower part of the church roof to develop through its upward sweep into a clerestorey that directly faced and illuminated the altar.

[288] Nuttgens, P. (1966) 'St. Bride's: an appraisal.' *RIBA Journal,* 73 (4), pp. 170-9.

By the penultimate church design, St. Margaret's, Clydebank, top lighting and roof structure had been separated. Two banks of roof-lights angled down onto the sanctuary. The first continues a line of glazing established around the perimeter, and focuses down onto the sanctuary and altar from its threshold with the nave, and the other – at a higher level, washes down the wall directly behind the altar, creating a strong contrast between light and shade on the stepped brickwork. All of the light-washed brickwork around the periphery is set in very direct contrast to the dark web of the steel space-frame that supports the wide-spanning roof. The visual separation of roof and walls, in tandem with the top lighting of the intervening zone, seems to reinforce the togetherness of the congregation and its attention on the sanctuary.

Fig. 54 3D model showing top lighting at the Archbishop's Oratory, 19 Park Circus, Glasgow (1948-55), Gillespie, Kidd & Coia

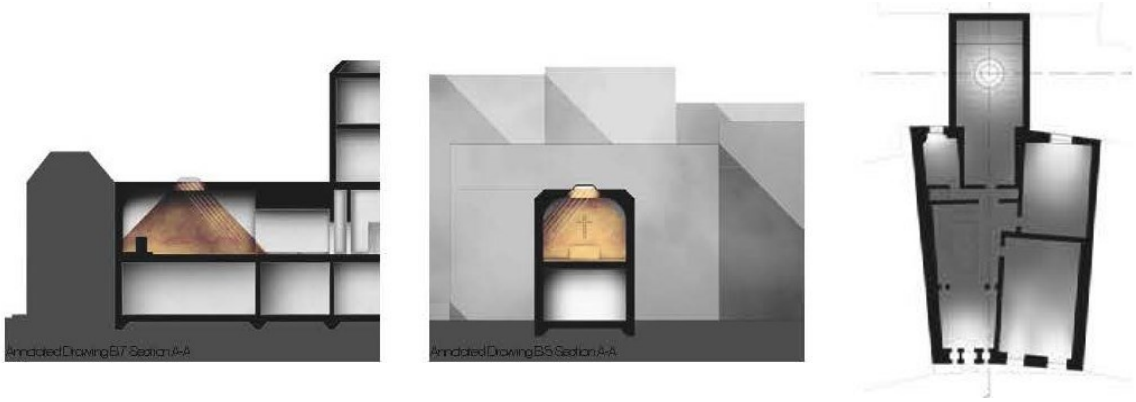


Fig. 55 Building sections and plan showing top lighting at the Archbishop's Oratory, 19 Park Circus, Glasgow (1948-55), Gillespie, Kidd & Coia

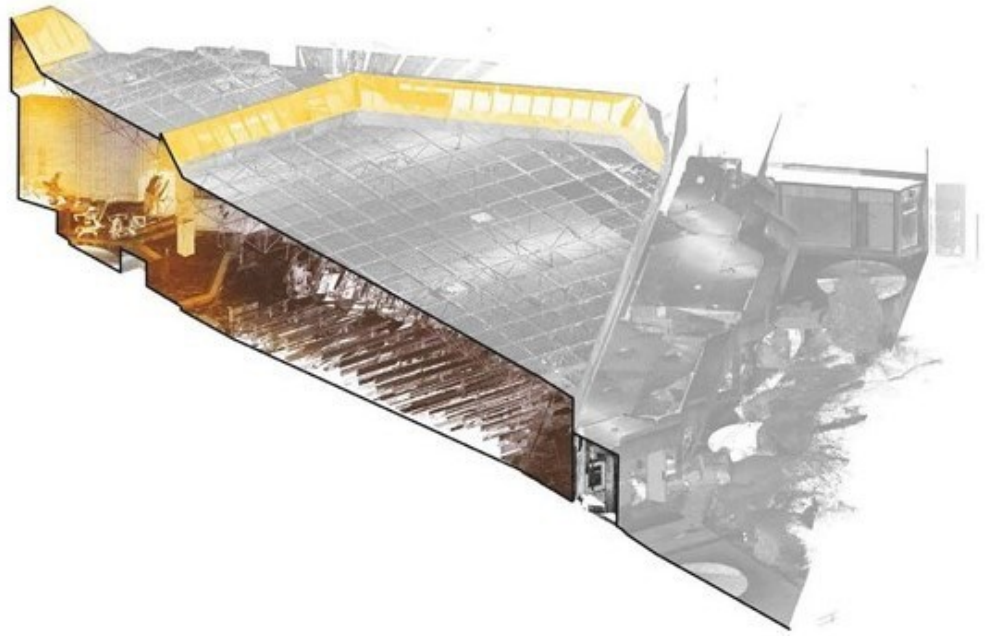


Fig. 56 3D model showing top lighting at St. Margaret's, Clydebank (1972), Gillespie, Kidd & Coia

Fig. 57 Building sections showing top lighting at St. Margaret's, Clydebank (1972), Gillespie, Kidd & Coia

Mixed light sources

At St. Martin's, Castlemilk (figs. 58-61), dramatic lighting is created from a combination of 'punched' wall apertures and repetitive roof lighting. An angled 'wing' flanks each side of the nave, each with oddly sized and placed fenestration. Each lateral wing is roofed with a monopitch, with a diagonally aligned ridge, such that the monopitch becomes deeper as it progresses towards the southern end of the building. At this point, it joins the centrally positioned hemispherical apse, which rises above the level of the nave roof. The two 'wings' frame a central section of roof above the main liturgical space, laid in an almost factory-like configuration of serrated rooflights. The horizontal bands of glazing are shallowly arched, and admit light to the interior; diffuse north light being trained onto the altar. Light is either focused from the glazing between the 'bowstring trusses'[289] above, or

[289] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p. 74.

else from glazing within the side walls; the apertures being angled within the depth of the wall towards the altar.

Another method of mixed lighting breaks down the unidirectional nature of the top-lit model by the separation of solid planar elements such as walls and roof, with glazing, seen at St. Patrick's, Kilsyth. The entrance to the church on its north-east side is indicated by a vertical break in the facade and a recessed pane of glazing to clerestorey level. To the east of the main entrance a plain reddish brick wall appears as a projecting plane, framed by the glazing of the entrance slot, clerestorey, and a further vertical shaft of glazing at the east end of the main facade, separating it from the south-east wall. Also on the entrance wall, light is used to articulate spatial volumes that project from the facade such as the narrow band of glazing which describes the projecting brick bay of the Mortuary Chapel, and the indirect overhead lighting given by four brick oriels with angled, glazed roofs. At the top of the entrance facade, a horizontal strip of clerestorey glazing extends the length of the facade and thereafter forms a continuous ribbon of high-level glazing around the perimeter of the church. Surmounting the clerestorey, a great billowing, angled lid-like roof structure composed of steel girders and clad in copper hovers above.[290] The reflections in the glazing then seem to create an illusion of near-absence of supporting structure. The north-west and south-east walls are notably blind, save for the clerestorey glazing and slit-like vertical window, deeply recessed and allowing focused light onto the baptismal font on the north-west wall. The sense of light at St. Patrick's. Kilsyth is less sublime than at St. Bride's because it is more constant. This is due to the clerestorey glazing that encircles the church's entire periphery, and the substantial areas of floor to ceiling wall glazing. More abstracted light percolates down light chimneys on the north-west wall, illuminating the long gallery above the nave, and from above, a light cannon casts light onto the High Altar. The south-west side appears as though the glazing were the principal plane of the wall and the brickwork the secondary. From the western end of this facade a vertical glazed shaft bearing another entrance is recessed almost by the entire depth of the vertical brick 'tubes' which house various elements within. Thereafter, narrower glazed slots that rise from ground to clerestorey set up an alternating rhythm between the first three equally-dimensioned brick elements. The glazed slots between the third and fourth, and the wider brick element are slightly wider, and adjacent to this is a very narrow strip of vertical glazing which connects to a wall that returns at 90

[290] Rodger, J. (2007) 'Selected works.' *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987.* Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City, p. 119.

degrees, enveloping the Lady Altar within. Between this and the monolithic south-east wall, a further recessed, vertically-orientated wall of glass admits light to the sanctuary, behind the High Altar.

The logic and legibility of St. Joseph's, Faifley, would have been appealing. Two monopitch roofs, a lower, shallower roof and a higher, more steeply angled one described the main body of the church. These were reconciled by a south-east facing clerestorey, illuminating even these peripheral spaces from above. Behind the sanctuary, the narrow oblong sacristy inhabited the length of the north-west wall, defined only by a wall between it and the church. It did not rise to meet the ceiling of the main church, nor did it have a ceiling of its own. Instead it was treated as a partially connected volume, with the angled ceiling of the main liturgical space oversailing it to meet the external north-west wall. The two were reconciled by a very narrow band of glazing which would have backlit the sanctuary, in addition to the high-level lighting from the opposite side by means of the clerestorey glazing at the interface of the monopitch volume.

Sacred Heart, Cumbernauld, a seemingly impermeable mass of solid masonry, re-uses the device of the wall pulling away from the roof to create a roof-level slot, which continues the firm's preoccupation with concealed and indirect lighting to invoke a specific experience inside the building. Inside, the church is relatively obscure, save for the multi-hued light cast by the irregularly patterned dalles de verre glazing on the north-west wall. Other sources of light filter down from the roof, creating a cave-like character. This occurs above the choir gallery near to the entrance and elsewhere, for example to demarcate the altar and sanctuary, where light is admitted from a rooflight and through a timber lattice screen with deep square voids. Here, the timber frames of the lattice extend downwards to differing depths. The singularity of the space was evidently important, as was the manipulation and inhabitation of walls and ceiling for both functional and ambient reasons.

The grotto-like interior of Sacred Heart occurs again at Our Lady of Good Counsel. It is characteristically highly controlled, beginning with the backlighting of the baptismal font at the top of the entrance steps, and strong illumination featuring also in the sacristy and side chapel. The nave is contrastingly shadowy as it rises to the apex of its roof, but its principal volume is broken by the great slash of roof glazing along the top of the lower monopitch. Deep timber beams anchored to the main north-south spanning beam, are revealed by the light, which also emphasises the pale, board-marked concrete of the substantial columns that support the roof structure, and just penetrates far enough to fall subtly across the altar steps. The glazing bars of the rooflight create a curtain seemingly made of shafts of light interspersed with shade. These create a transient yet powerful

separation between the different spaces. A small light chimney along the west facade also creates odd lighting effects on the angled ceiling as it interacts with the brick curve of the gallery stair. On the east side, the narrower, lower strip of clerestorey glazing highlights the edge of the altar, and in the vertical copper-clad element of the west facade, the small apertures in the metal filter through the internal timber cladding, creating small areas of diffuse light within the roof volume.

At St. Benedict's, Easterhouse, the lighting potential associated with a building's cross section is once again celebrated by the indirect illumination of space. As noted, on either side of the entrance, peripheral accommodation is housed with structures that do not meet the oversailing roof (the lower of two monopitches). This device was used previously, but here is not defined with light as St. Josephs, Faifley and Our Lady of Good Counsel were. Instead, light is focused within these peripheral spaces rather than by way of apertures demarcating them from the roof of the principal enveloping volume. Light is focused from the clerestorey, and washes down the steeply monopitched roof to the main space, into the general area of the altar. There is no lateral illumination of the altar, as had been the case previously.

Fig. 58 Building section showing mixed light sources at St. Martin's, Castlemilk (1961), Gillespie, Kidd & Coia (Adam Whiting).

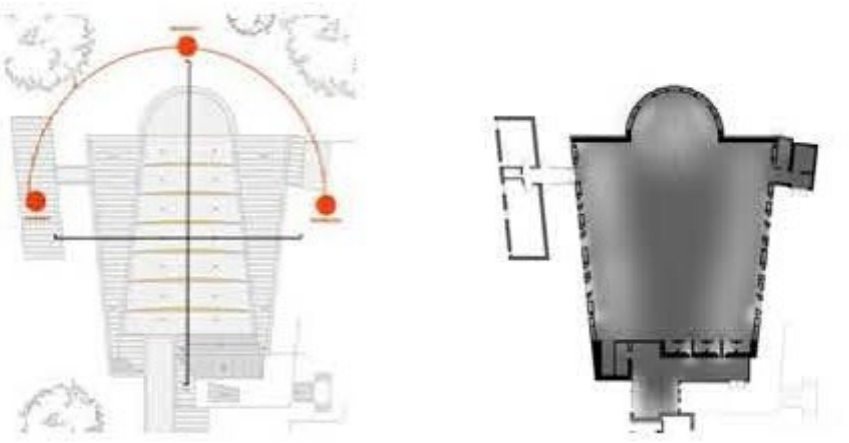


Fig. 59 Diagrammatic plans showing sun path (left) and mixed light sources (right) at St. Martin's, Castlemilk (1961), Gillespie, Kidd & Coia

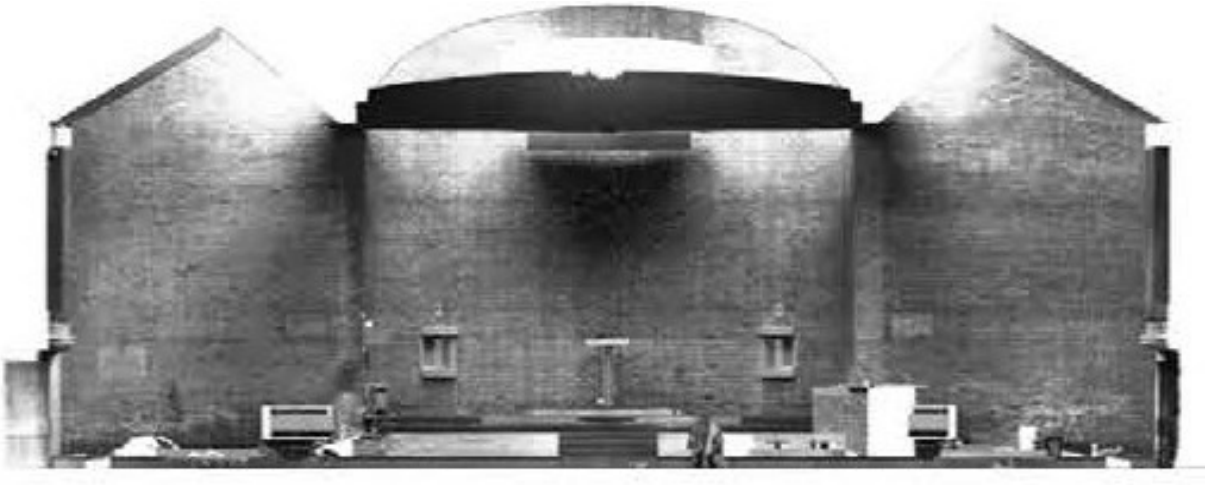


Fig. 60 Photographic section showing the relationship of light to the roof structure of St. Martin's, Castlemilk (1961), Gillespie, Kidd & Coia

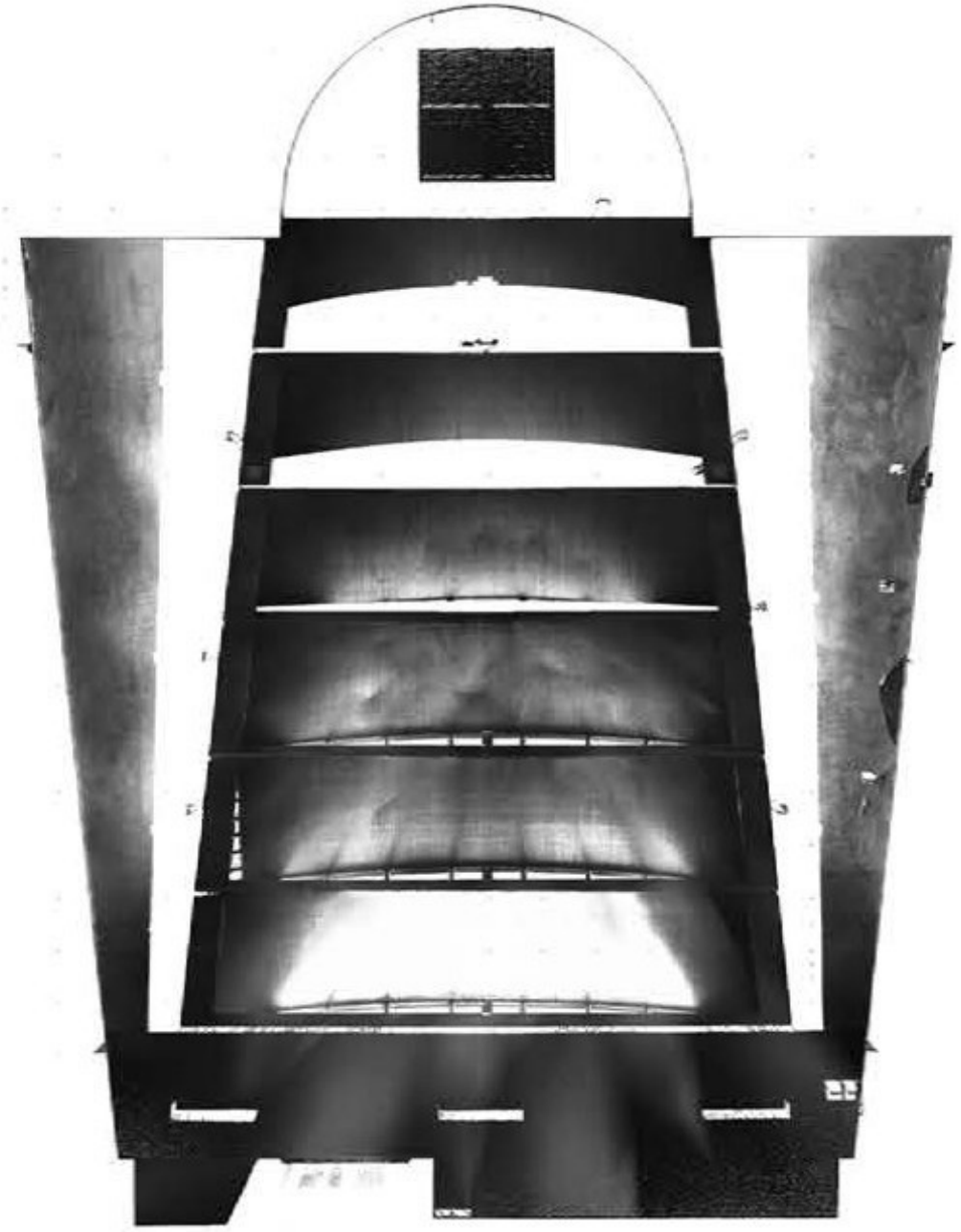


Fig. 61 Photographic ceiling plan showing the relationship of light to the roof structure of St. Martin's, Castlemilk (1961), Gillespie, Kidd & Coia

Sanctuary lighting

While the naves of the early basilican type churches tended to be fairly evenly lit, their sanctuaries, generally shallow and broad, were lit either with glazing within the space itself, or only indirectly from the nave. The sanctuaries of St. Anne's and St. Patrick's are expressed as an external projection from the main building volume and in the case of St. Anne's the altar is illuminated by oblique side-lighting from two large windows on the

angled apse walls, whereas St. Patrick's is illuminated by a dormer window on each side. On the contrary, St. Columba's sanctuary is expressed as an external projection but is not lit by any windows within the space itself, instead relying on the contrast with the nave - and electric lighting - to provide focus.

St. Columbkille's and St. Peter in Chains differ in conception as their sanctuaries, although demarcated internally, are not defined externally but rather are situated within the overall footprint of the building. St. Columbkille's terminates the nave in a semicircular sweep; a dynamic reconciliation of both sides of the nave with a baldacchino placed within the windowless sanctuary wall. St. Peter in Chains, on the other hand, features a small octagonal window above a baldacchino within its rectilinear sanctuary, demarcating the end of its liturgical axis.

In the postwar period a new, more subtle method of demarcating the sanctuary occurred. At Holy Family, for example, the setting back of the final structural bay highlights the liturgical focus of the church, and has recessed glazing within it. It is largely unnoticeable until proximity to the sanctuary permits, and provides elusive and indirect luminosity to the space - especially to the altar. This panel is composed of a brick infill wall approximately to the level of the tabernacle within the sanctuary. Above that and up to the level of the eaves, spanning the full width of the structural bay is a richly glazed panel, divided into three horizontal sub-panels, the deepest of which is in the middle. Each horizontal delineation features a deep timber transom with much narrower timber mullions arranged in random spacing in between, thereby dividing the overall panel into sub-panels of glazing of different widths. The narrowest of these are filled with red, blue or yellow coloured glass, reminiscent of a Mondrian painting. At St. Mathew's, Bishopbriggs too, the sanctuary itself is defined only by a slight inset from the main body of the nave, and is side-lit, though by more modest glazing than that seen at Holy Family.

At St. Columba's, East Kilbride, the only source of natural light enters the building by way of a light chimney elevated above the principal roof level. Sunlight is admitted from the eastern wall of the chimney, casting light onto the rear west-facing sanctuary wall and indirectly lighting the sanctuary. The top lighting emphatically marks its position as the reconciliation of two wings of tiered seating at 90 degrees to one another.

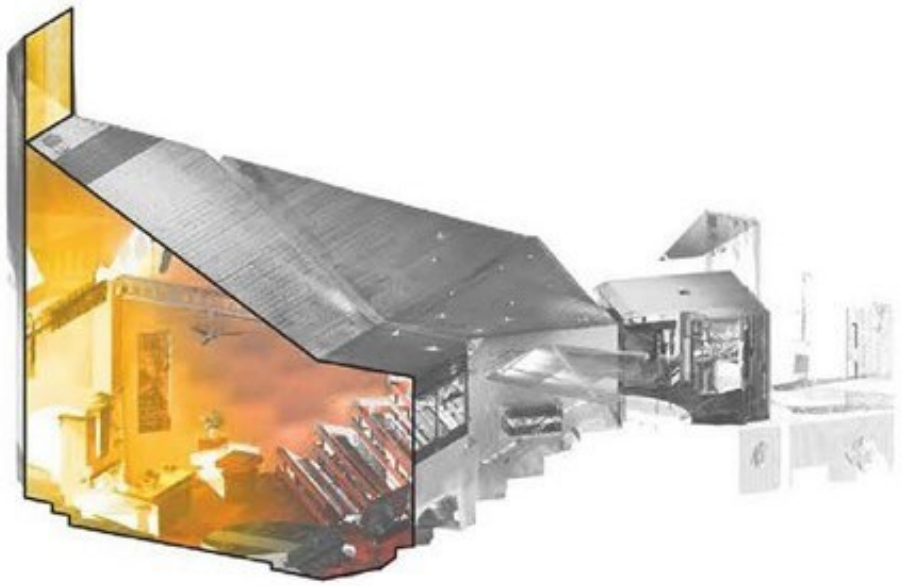


Fig. 62 3D model showing sanctuary lighting at St. Columba's, East Kilbride (1979), Gillespie, Kidd & Coia

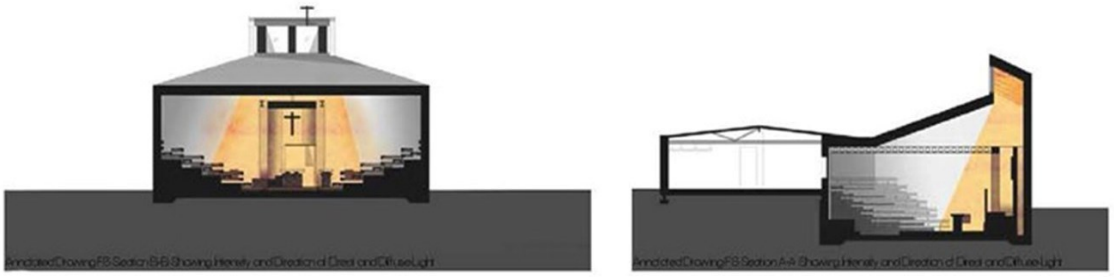


Fig. 63 Sections showing sanctuary lighting at St. Columba's, East Kilbride (1979), Gillespie, Kidd & Coia

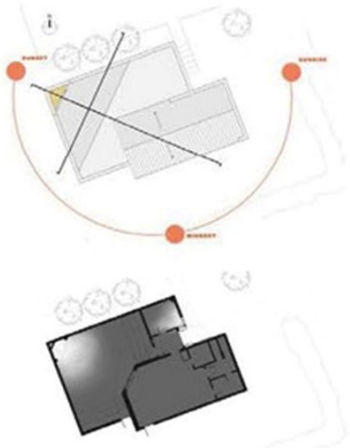


Fig. 64 Diagrammatic plans showing sun path (top) and sanctuary lighting (bottom) at St. Columba's, East Kilbride (1979), Gillespie, Kidd & Coia (Alex Gabrysch and Zena Moore).

Other distinctive lighting

The relationship of section to light is investigated further through the reduction of solid building envelope. In contrast to the solid masonry entrance 'towers' of St. Columbkille's and St. Columba's, in the 1950s, simple portal-like fronts were sometimes accentuated through the use of glazing. This can be seen at St. Andrew's, Airdrie, the Roman Catholic Chaplaincy, Turnbull Hall, St. Vincent de Paul, Thornliebank, and St. Charles Borromeo, Kelvinside. The Roman Catholic Chaplaincy (figs. 65-68) is a particularly strong example. Within an otherwise sealed masonry box, the large panes of glass in the entrance gable to the chapel admit shafts of light that penetrate as far as the sanctuary at the opposite end of the building. The building also has a narrow vertical slot window to one side of the sanctuary, admitting east light onto the altar. Light is focused on the liturgical axis of the building, creating a strong and direct connection between entrance and sanctuary.

Fig. 65 Cross section showing axial lighting from the entrance front, and altar lighting of the Roman Catholic Chaplaincy, Turnbull Hall, University of Glasgow (1955), Gillespie, Kidd & Coia

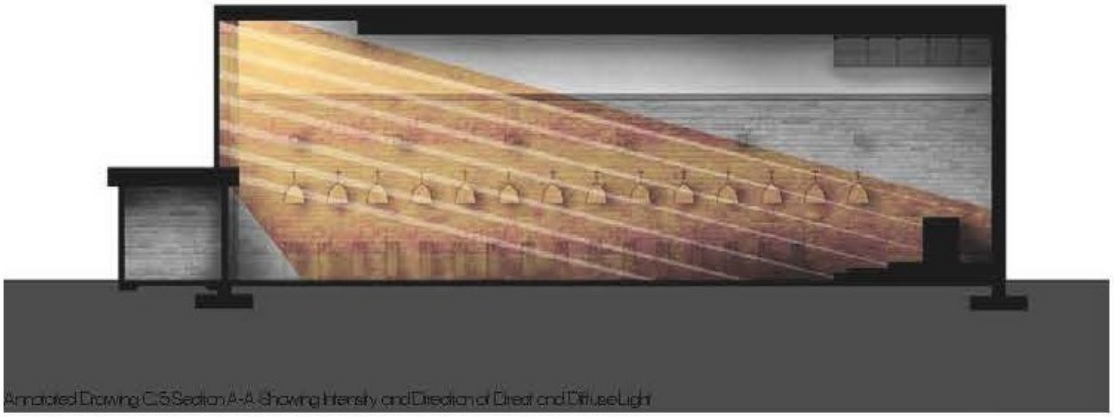


Fig. 66 Long section showing axial lighting from the entrance front, and altar lighting of the Roman Catholic Chaplaincy, Turnbull Hall, University of Glasgow (1955), Gillespie, Kidd & Coia

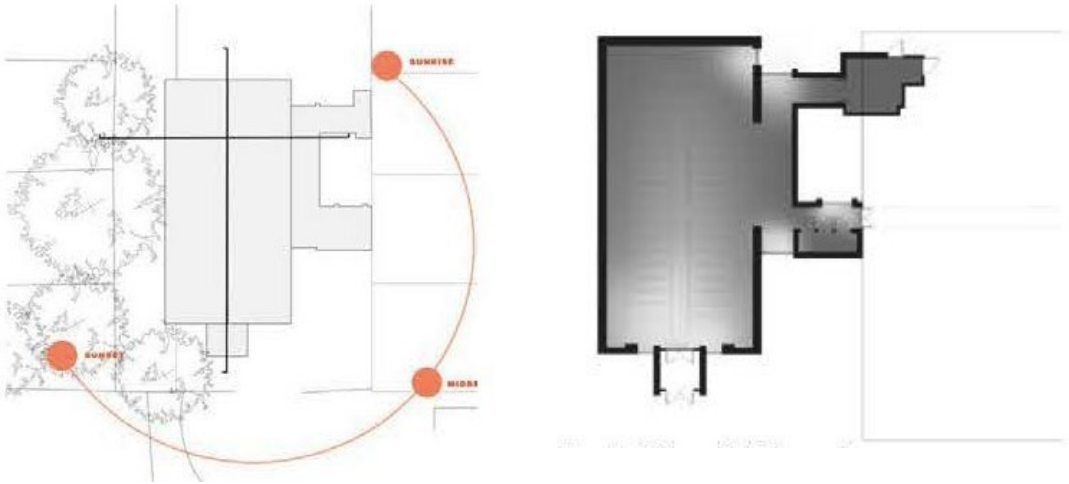


Fig. 67 Diagrammatic plans showing sun path (above left) and axial lighting from the entrance front, and altar lighting (above right) of the Roman Catholic Chaplaincy, Turnbull Hall, University of Glasgow (1955), Gillespie, Kidd & Coia

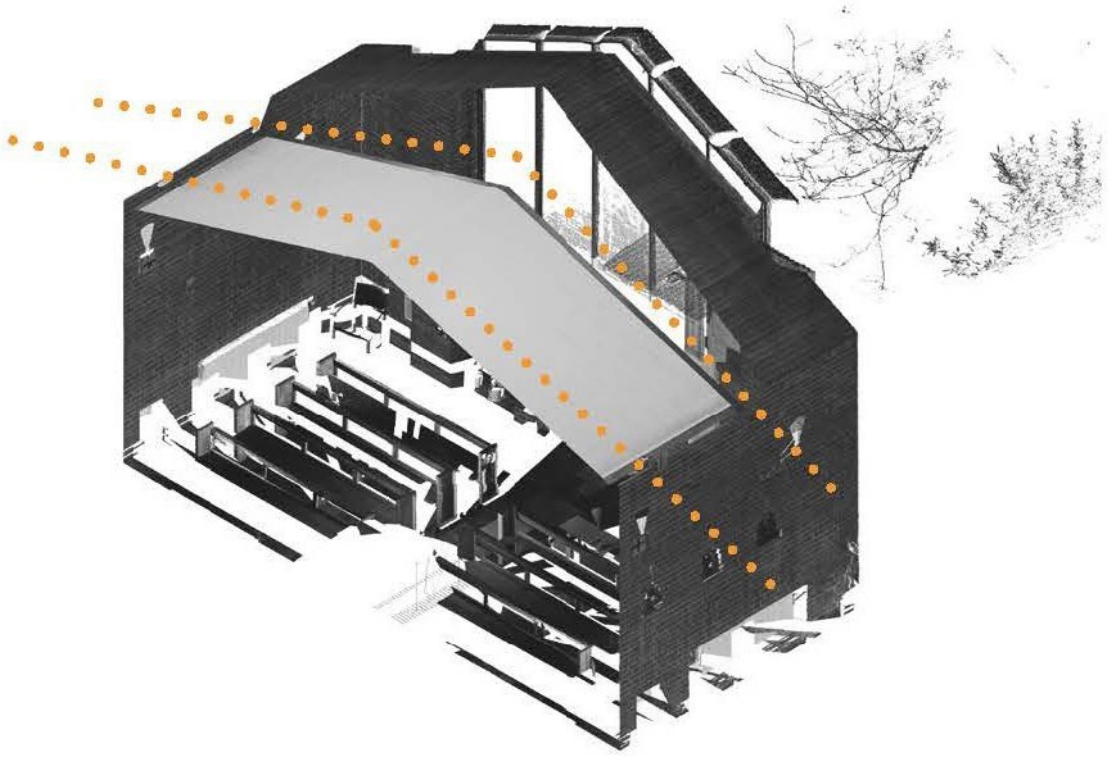


Fig. 68 3D image showing the sectional form creating the glazed portal front of the Roman Catholic Chaplaincy, Turnbull Hall, University of Glasgow (1955), Gillespie, Kidd & Coia (Alex Gabrysch and Zena Moore in collaboration with Hobs Studio).

Conclusion

In the earliest churches, general, lateral lighting with focused sanctuary side-lighting characterised internal spaces, and were combined sectionally with vaulted ceilings or roofs. Increasingly, fenestration positioned on the long side walls of basilican churches began to emphasise repetitive structure by filling structural bays with glazing. After the war, lateral lighting in the long, narrow, low box-like basilican churches with flat ceilings, had a tendency to emphasise their axial nature.

In post-war design, a more dramatic use of focused light highlighted the direction of the altar, the qualities of materials, or the articulation of structural elements such as wall, roof, linking to Le Corbusier's design for Ronchamp. Light was sometimes also contrasted with

more deliberate obscurity, such as the dramatic and mysterious effects of shafts of light filtered through the ceiling and stained glass as at Sacred Heart. Top-lit designs and overhead sanctuary lighting created immensely introspective spaces such as St. Columba's, East Kilbride.

2.5 Section: Structure

In addition to the more abstract architectonic considerations of structure - whether hidden, expressed repetitively, or solid and planar - and Gillespie, Kidd & Coia experimented with all of these constructional choices throughout their practice - an overarching link between structural organisation and the core purpose or parti of ecclesiastical design can be found in its tendency towards directionality or centrality.

One of the most outwardly recognisable traits of Gillespie, Kidd & Coia's churches is the degree to which structural logic is able to be read from external examination. It can be argued that, despite an outward sense of decorum, especially in the main facades, which authors such as Watters associate with Glasgow's Beaux-Arts legacy,[291] it is also perhaps the same attribute that lends a certain logic and structural clarity to other aspects of the firm's early work. Engaging then with Modernism's emphasis on structural and material rationality and 'honesty', immediate post-war churches either appear to investigate holistic structural expression from inside to outside, or else become a more economy-driven model, but still materially honest in their no-frills approach to structure. Later on, the focus on spiritual journey sometimes separates different structural approaches, with heavy masonry envelopes concealing poetically organised repetitive structure within.

The churches can therefore be organised into those whose main narrative relates to the building's - and hence the liturgy's - sense of directionality - and those which are key to its centrality.

Directional structure

[291] Watters (2016) *St. Peter's, Cardross birth, death and renewal.* Edinburgh: Historic Environment Scotland in association with NVA, p. 240.

The following examples are sub-themes relating to directional structure.

Gillespie, Kidd & Coia's first obviously directional use of structure occurred at St. Patrick's, Greenock. The cross-section of the roof structure and integration of the structural framework drives this directionality, then seen again at St. Peter in Chains, Ardrossan.

Another type of directional structure can be found in the internally expressed repetitive structural frames of St. Columba's, Woodside, which are then revisited at Holy Family, Port Glasgow, St. Laurence's, Greenock, and again at St. Charles's, Kelvinside and St. Mary of the Angels, Camelon.

A third type, planar structure, often used in combination with simple masonry piers, sometimes accentuates the planar massing of walls and ceiling to emphasise massiveness. The first time this approach was used was at St. Columbkille's, Rutherglen, appearing again in some of the post-war basilican churches.

Integrated structure

A more abstract composition than that of St Anne's, the front facade of St. Patrick's hints more at the roof structure behind. Longitudinally the design sets up a strong rhythm across the nine bays of the nave and sanctuary. Due to a level difference across the site, the building's windows appear high within the overall composition. Their vertebrae-like articulation dominates side elevations through lack of transepts. Their form has been simplified to that of oblong panels of glazing, recessed and framed in rectangular brick dormers, headed with flashing in a stylised, simplified and subtle broken pediment motif. Structural bays generally frame groups of three short rectangular 'lancets' at ground floor level, with each structural bay defined externally as the space between brick buttresses, cranked back to follow the angle of the roof and coming to rest at the base of the dormers.

Internally the mansard roof profile and dormers, coupled with the heavy brick piers separating nave from 'side aisle' walkway, assume great importance in the modulation of axial space from entrance to sanctuary.

St. Peter in Chains again strongly integrates structure with its cross-section. The interior space appears very broad as there are few supporting piers between nave and side-aisles; the latter becoming substantially part of the nave, save for the paired brick piers on

either side of the building at each end. The church has wide rectangular leaded windows, which fill the bays between the vertical structure at the level of the side-aisles, yet above all is not quite as it seems. Externally, high-level windows are expressed as clerestorey windows set within the structural bays in a similar way to those in the side-aisle walls. Inside, however, due to the angled vault of the ceiling springing from a point immediately below the level of the bottom of the windows, they appear as wide rectangular leaded dormers separated by triangular infill elements.

The side elevations; north-west and south-east, are typically basilican in cross- section yet do not feature the pointed-arched apertures of the main elevation; the simple rectangular windows having more affinity with Schwarz's Corpus Christi, Aachen. However, the elevations are not identical in their termination at the front – whilst the north-west side-aisle terminates with a hipped roof, the south-east side-aisle does so with a simple mono-pitch roof and is set back from the front face of the tower.

Internally expressed framed structure

St. Columba's, Woodside has a steeply-pitched mansard roof, which does little to introduce the structure within. The side-aisles are described as lean-to adjuncts to the dominant volume.

This is the first instance of a complete visual detachment of principal elevation to main building, in height and in form. The boxy, oblong form overshoots the mansard roof behind, and is completed with a cornice and a low-pitched hipped roof which is virtually invisible from the immediate vicinity of the church.

Longitudinally, the structural bays are not as obvious as those of St. Patrick's; here they are delineated only by groupings of five narrow, round-headed clerestorey windows. Ten bays make up the nave, with a further bay at each end for the vertical, oblong narthex and the chancel respectively. The penultimate bay of the nave at the sanctuary end evolves from the steep lower pitch of the mansard into a shallower pitched catslide, on each side of the nave, which has the effect of integrating the lower, single-storey roof of the side-aisle structure, hipped on right- angles and broad-eaved, thereby creating an overhang. The side-aisle structure extends outwards at each end of the nave and again in the centre to accommodate confessionals. Their external expression takes on greater prominence due to the lack of transepts.

Apart from the nave roof's conspicuousness in massing and colouring, it assumes further sculptural qualities. These are evident in the rows of triangular ventilation hoods on either side of the ridge, and in the chimney stack adjacent to the catslide roof at the south corner of the church, connected to the boiler room in the basement of the building, and delineating the pivotal point between the church and presbytery. The sanctuary terminates in a different way again to St. Anne's and St. Patrick's. Although the main body of the church ends bluntly at the south-west end, it is in fact terminated by a five-sided, blind-walled apse, topped with an equally five-sided roof with a convex curve towards the eaves and a convex curve towards their convergence with the wall of the main volume of the church.

Internally, the church represents a departure from the previous two. At St. Columba's, the regulating dormers and largely hidden structure have been set aside in favour of a more structurally expressive model, whereby longitudinally thin but laterally wide structural concrete arched portal ribs define the nave – giving an impression of relative flatness when viewed from one end or the other – and assuming quite literally the qualities of an upturned boat. Essentially the church is constructed of a set of expressed, reinforced concrete portal frames between which are brick and glazing.[292] Smaller, one storey-high pointed arches define the side-aisles; their repetition down the length of the nave contributing to a heightened sense of perspective. A final pointed arch demarcates the end of the principal space and the transition into the apse, where the focus is conspicuously introspective due to the lack of natural illumination.

St. Laurence's Greenock develops the strong expressivity of the Gothic concrete frame, as Coia's own description of it as 'a nice essay in modern Gothic', attests in correspondence from 1949 with the parish priest, Rev. John Daniel.[293] Inside, the real majesty and beauty of the church becomes apparent. Like a giant upturned boat and in this church we see a further development of those concrete rib-like structures, first used at St. Columba's in 1937. Here, each bay is defined by them – very slender, curved, concrete arches – wider transversally than they are along their longitudinal axis. They also form an integral structural device with the side-aisles, through which narrow, slim, tall, highly-pointed arches are punched through the concrete, so that the whole structural ensemble is integrated transversally across the church. This has the effect of creating intensely focused perspective down each side-aisle, terminating in a side-aisle on either

[292] Blaikie, G.(2015) *St. Columba's Church Glasgow-architect Jack Coia.* Jack Coia, architect – early works. [Online] [Accessed on 2nd May 2015] http://www.scotcities.com/coia/stcolumba.htm./

[293] Coia, J. (1949) *Letter to Rev. John Daniel*.19th April. REF. JAC/JTB. Source: GSA Archives.

side of the sanctuary in addition to the nave, terminating at the sanctuary. The main liturgical space is such that the arched ribs do not actually appear to join at the top. At about two thirds of the way up, they are homogenized into a continuous (though still curved) surface, that runs the length of the liturgical space.

These repetitive, dramatic concrete arched structures share some similarities with Easton & Robertson's Royal Horticultural Society Floral Hall in Kensington (completed in 1928). The blocky massing of St. Columba's entrance front is also reminiscent of the tall front entrance block of Easton & Robertson's building. Proctor identifies a similar connection between this precedent and Stokes & Partners' Our Lady of the Visitation, Greenford, London (1956-60).[294]

The feeling of the separateness of the various ecclesiastical elements at Holy Family, Greenock is striking, and something that was not truly seen again until the construction of St. Charles Borromeo, Kelvinside, which followed the completion of Holy Family in 1959. Yet in reality, their apparent separation is really articulation; the campanile being joined to the main church in its lower portion – a glazed 'bridge' connecting it lightly and almost transparently, to the west end of the church. A similar device joins the presbytery to the north wall of the church, at the seventh structural bay (of nine). The dominant aesthetic of the church is of a restrained and rational clarity; a large oblong box constructed of concrete portal frames, infilled with brick, with shallowly-pitched, green copper-clad roofs.

High level, horizontal clerestorey glazing punctuates both long elevations, north and south. Again, it occupies the entire width of the structural bays, in three sub-divided panels, and emphasises that the brickwork between the structural frame is only infill; creating a narrow void between the top of this and the eaves. Notable here is not merely the use of creative structure, but structure beginning here to be expressed externally as well as internally, as it was with the 1930s cluster. Indeed, each structural frame is expressed externally, which on the dominant north side, suggests a light touch with the hillside on which they rest.

They also create a delicate illusion of levitation from the inclined ground surface, as the lowest level is recessed back from the frames, with the resulting cast shadow just above the ground further adding to the illusion. At the lowest level, the frames are expressed as fair-faced concrete rather than over-clad in slightly projecting brickwork as they are above,

[294] Proctor, R. (2014). *Building the modern church.* Farnham: Ashgate Publishing Limited, p. 79-81.

as if to further emphasise the effect of the main bulk of the church hovering a storey above the prinicipal level.

Passing the glazed ‘bridge’ that connects to the presbytery, the last structural bay (of both the north and south facades) features an infill panel recessed from the plane of the neighbouring infill panels, in a gesture that would characterise many of the firm’s 1950s churches. The setting back of this final bay within the sequence demarcates the sanctuary, and the recessed glazing within it.

St. Andrew’s, Airdrie (1953) follows the general pattern of geometric basilican churches of the preceding years of the decade, however, its concerns focus more intently on structural expression. The church is primarily a shed-type building formed by a series of angled concrete portal frames, developing such preoccupations exhibited at Holy Family and St. Joseph’s, and further anticipating St. Charles. The front façade of St. Andrew’s is simply an infill to the structural frame expressed around its edges.

At St. Charles Borromeo, the syncopation of the elements, elicited by a powerful structural matrix seems to control one’s experience of the church. Entry is at the east end, beneath the gable, infilled mainly with reddish-brown brickwork at ground level. Above a lateral concrete element surmounting the timber entrance doors frames a pleasing hierarchy of orthogonal elements. These create a vast glazed screen organised by rows of secondary horizontal concrete structure and slim, double vertical concrete elements regulating the elevation into modules, which are further sub-divided into eleven slim, vertical panels of glass, separated by a single slim concrete mullion. A narrow band of glazing extends below the lateral structural element, effectively separating the brickwork from the concrete structure – as if to further emphasise its presence and a turning away from solid load-bearing masonry construction. However, the visitor is not simply presented with the severity of the east elevation; approach to it is tempered by the one-storey baptistery that appends itself to the main building front at ninety degrees. This element speaks of the playfulness and liberation that can be achieved when the structure and walls of a building are separated. Here, the concrete frame is even more highly abstracted from the walls; an orthogonal exo-skeletal structure, which allows a brick wall within to envelope the space inside. However, the separation of skin and structure is particularly emphasised by the hemispherical completion of this element of the church. It is not only a more polite resolution to a subsidiary part of the building, but one which seems to exist hierarchically – deferentially leading to the main entrance within the semi-enclosing crook that it creates with the main entrance front of the church.

Framed by the exposed concrete structure, the nave is entered by way of doors forming part of a clear glazed infill screen; the angled geometrical concrete planes of the ceiling dipping down to meet columns and canting up to emphasise the centre of the structural bay, and therefore on axial focus with the sanctuary at the west end. Beyond the doors is a vast, single worship space, with ancillary spaces on either side. The relationship of structure, infill and the glazed gaps in between creates a rich and dramatic ambience of intense light and deep shade; and cast shadows that enliven the sheer planes of brickwork.

The legibility of St. Charles Borromeo is striking. There is an anthropomorphism in the spindly tapered columns arranged down the length of the nave. At the termination of the nave, they create, with tall, curved, brick infill panels, a broad apse, whose radius causes the facetted concrete roof to take on an even greater intensity. On either side of the nave, the horizontal concrete structure that lies just above one storey in height laterally stabilises the vertical tapering legs until the point, on both the north and south sides, just before the sanctuary, at which there might be a transept.

Aligned with the principle vertical structure of the main church building and abutting the wide end of the angled volume is a forceful vertical punctuation mark
– a plain brick-built chimney stack rising from ground level to several metres above the level of the roof of the main body of the church. To the east of this, to the vertical concrete frame that delineates the corner of the building at its eastern end, is a storey-high panel of glazing; in effect, breaking down and significantly
inverting the hierarchy of brickwork and glazing.

The examples from the early 1950s seem to emphasise a preoccupation with volumetric abstraction. Cubes of space shift into positions of spatial autonomy; and a sweeping horizontality is perhaps anchored by the counterpoint of a campanile, but St. Charles's is defined by the upward emphasis of a structural skeleton and by a complete separation of functional entities and a deconstruction and expression of parts forming a whole.

Although wrapped in a brick envelope, the interior of St Mary of the Angels, Camelon, exhibits a totally opposing structural rationale. A row of split timber posts form the structural basis of the joining of the two volumes. These are positioned on one side only, such that the main aisle is actually within the lower, side-chapel volume, and therefore in the subsidiary space rather than the main liturgical space adjacent. These twin columns support deep timber glulam beams, the articulation of which is celebrated in the slight cantilever beyond the posts, into the larger volume. Comparisons to the spiritual

architecture of Northern Europe – particularly Lewerentz's church at Klippan, can be drawn, and Rogerson connects it – presumably via Glasgow School of Art's timber library structure - to Mackintosh.[295] The use of deep timber beams is repeated over the main liturgical space, connecting to the top of the wall at clerestorey level.

Planar structure

St. Columbkille's is characterised internally by the unity and massiveness of its smooth planar nave walls and rounded apse wall. The flat timber ceiling compounds a sense of heaviness although the spanning timber beams and arcading on either side of the nave reveal the structural bays underpinning the space.

The dominant side elevation to Kirkwood Street is constructed of facing brickwork and is underpinned by a logical arrangement of structural bays, which define the dimensions of the confessionals. There is, however, an irregularity of placement and number of confessionals on opposing long elevations. The east elevation to Kirkwood Street, from north to south, has, after turning the corner, one intercolumniated recess, followed by a pair of confessionals occupying one structural bay, followed by a three-bay recess with no intercolumniations, a further pair of confessionals, an entrance (also using one structural bay), then the east transept, which, again, represents a single bay.

The pattern of the west elevation to Greenhill Court is arranged in the following manner: intercolumniated recess, paired confessional, intercolumniated recess, paired confessional, intercolumniated recess, paired confessional, entrance, transept. Owing to this rhythm, the lean-to roof projects uniformly along the elevation, whereas on the east elevation it follows the line of the projections and recesses accordingly.

After the Second Word War, while some of the larger churches such as Holy Family and St. Laurence's would experiment with internally expressed framed structures, a significant number relied on planar surfaces, often with flat ceilings, and simple masonry piers, to enclose liturgical space, resulting in an emphasised linearity.

St. David's, Plains was designed in the same mode as St. Matthew's and others of the early 1950s, It is maximised spatially by the placing of an asymmetrical row of structure to

[295] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p. 73.

distinguish the nave from the single side-aisle. Due to this, Rogerson comments on the reduction of perceived narrowness when compared to the others of the same period.[296] This occurred to a less obvious degree at St. Michael's, and would appear again in the sublime asymmetrical timber post and beam structure a decade later at St. Mary of the Angels, Camelon.

Churches such as St. Michael's, Dumbarton have effectively hidden a structural framework beneath a planar skin. Constructionally, the church consists of a steel frame, clad in reddish-brown brickwork, originally covered with a corrugated asbestos roof, due to post-World War 2 material shortages. Most dominant though, is the clerestorey glazing, significant in its elevated position from the road, and as a series of nine striking rhomboidal windows – each representing a structural bay - picked out in white-painted frames against the brickwork.

On the south side, the structural columns, which correspond with the confessionals, have a similar sense of recognition of human scale, as they are
only expressed as columns to a height of one storey.

Churches such as St. Paul's, Glenrothes begin to use the solidity of the planar wall in tandem with the careful control of natural light. The church is effectively contained within a solid, blind brick envelope to the south, east and north. St. Martin's, Castlemilk (fig. 69), combines thick, double-skin brick walls – albeit with punched, angled fenestration, with lightweight 'bowstring' roof trusses training light onto the altar, and St. Mary's, Borrowstouness breaks down solid lateral walls further into masonry piers connected by glazing.

[296] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson pp.36-37.

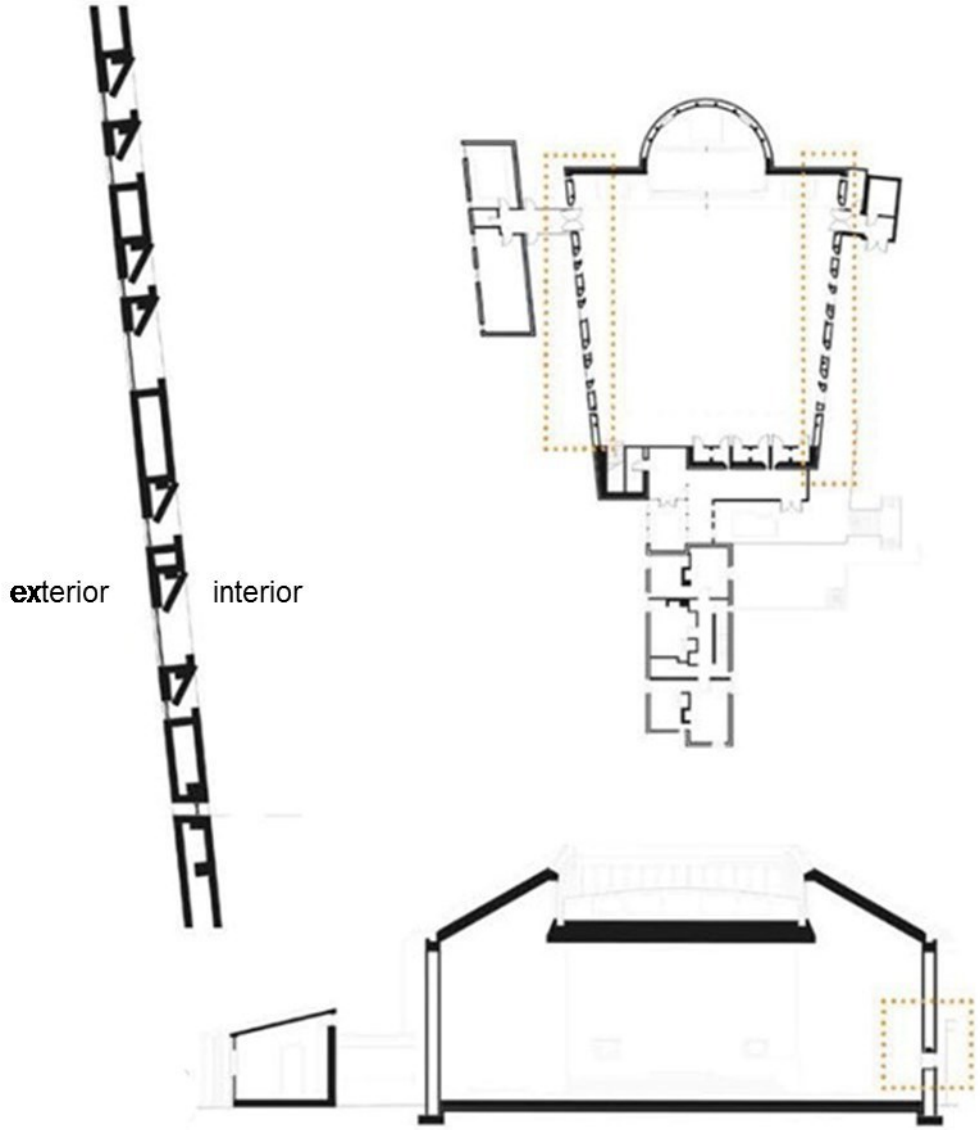


Fig. 69 Structure of St. Martin's, Castlemilk (1961), Gillespie, Kidd & Coia. **Left:** detail of double-skin wall, **above:** plan diagram highlighting double-skin wall, and **below:** sectional diagram highlighting double-skin wall

St. Bride's, East Kilbride is a large, windowless brick box on its periphery; but it is far from uninteresting. The massive, cliff-like brick walls with striking variation in both tone and surface texture, seem to elevate them into a geological colossus bursting from the hillside; the vertical chasm of the entrance only intensifying this experience.

The recesses and 'chimneys' of the east wall and the latticed ceiling have already been discussed in lighting terms, but they are clearly also integral to the building's structural rationale. Another opening reveals a narrow stair that coils almost into the thickness of the inner and outer leaves of the wall; the outer leaf only bowing out subtly to accommodate it.

At the top, the stair emerges onto a small balcony overlooking the nave – in fact, the pulpit – which seems to unfold organically from the great west wall. The high altar is marked by both indirect roof lighting, and by a simple bulge in the brick wall behind it, at ground level. All four massive external walls are double-skinned, and are all load bearing.

St. Patrick's, Kilsyth too is essentially a load-bearing brick box, although wall planes and roof are much more individually articulated, as discussed. The roof itself – a copper-clad arrangement of steel girders supported by the load bearing brick diaphragm walls,[297] seems less integrated into the internal experience, yet this very separation is part of its aesthetic – the narrow band of clerestorey glazing seemingly undertaking the Herculean feat of supporting the massive, deep roof structure. The horizontal line of concrete arcaded vaulting of the exterior is repeated internally, forming the floor of the gallery space.

Centralising structure

Examples of centralising structure exists across a range of churches, and incorporates both planar and lightweight, repetitive, or framed systems. A number of examples are discussed here, with the first, St. Anne's, discussed in hybrid terms.

Although discussed earlier in terms of its basilican layout, in the three dimensions of section and volume, St. Anne's (figs. 70-72) lies somewhere between directionality and centralisation. This is in part due to the length of its nave relative to its width, the extra width given by the counter-axis of the side chapels, but also to the downward orientation of its barrel-vaulted ceiling which envelopes the entire nave and side chapels. There is effectively a groin-vaulted crossing at the meeting point of the two axes; one of the points of Schwarz's idealised altar positions.

St. Anne's is a building of some contradiction, and one in which stuctural legibility is hard to discern. The hierarchical pedimented Italianate front, for example, says nothing of the Romanesque barrel-vault within; itself surprising in the relative lightness of its intersecting dormer windows. Furthermore, beneath the external skin of brickwork, contemporary

[297] Rodger, J. (2007) 'Selected works.' *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987*. Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City, p. 119.

construction materials such as reinforced concrete and structural steelwork were used.[298] This would have lessened both cost for an Archdiocese needing to keep a very careful eye on its accounts, and time, because this was one of the first churches commissioned by the Archdiocese of Glasgow to cope with a restructuring of parishes to cope with an expanding population. At this stage these materials were regarded as structurally necessary but aesthetically subservient to the principal envelope of brick.

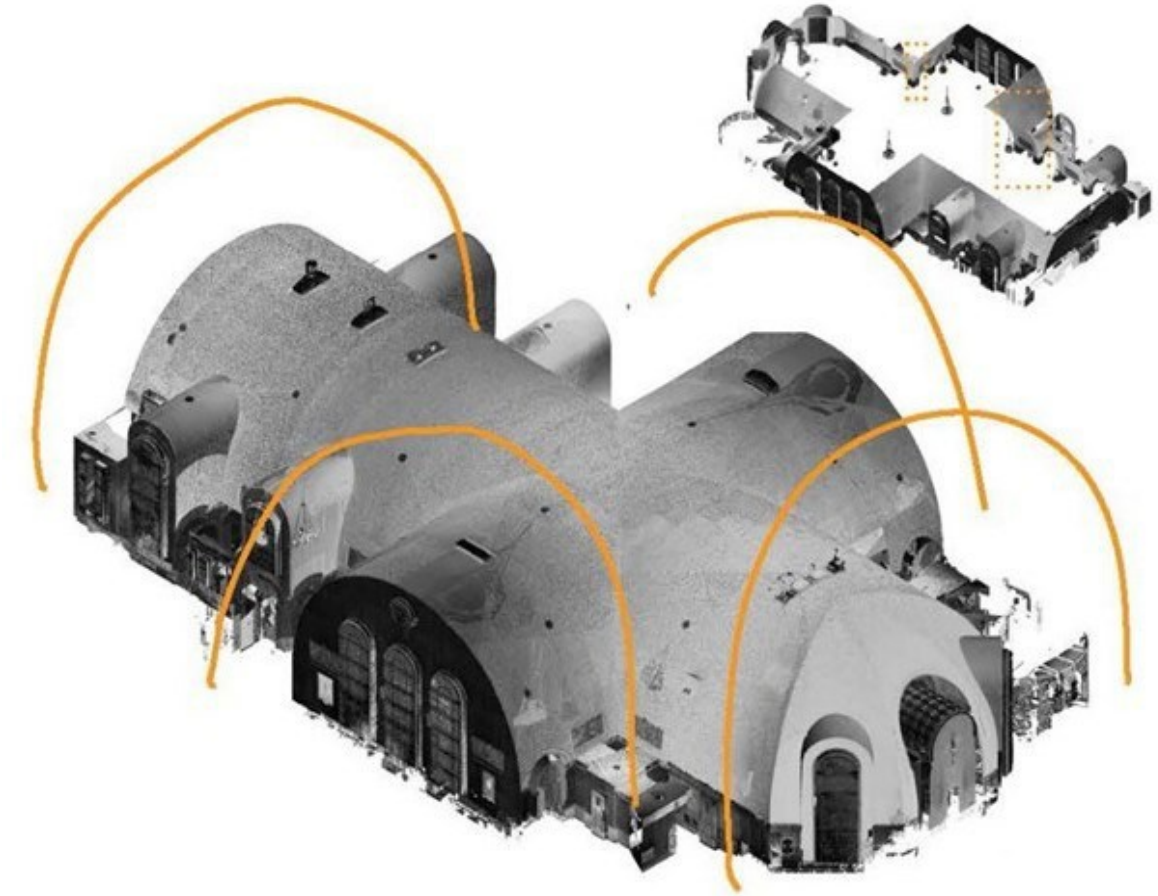


Fig. 70 Masonry structure and barrel vault of St. Anne's, Dennistoun (1931-3), Gillespie, Kidd & Coia

[298] The 'Ogment' steel construction system was specified on the engineer's drawing, B. Carson & Gillies of Glasgow. They advertise this system of construction in the Post-Office Annual Glasgow Directory 1930-31 See Drawing number J744/1, April 1931, 'St. Anne[']s church Glasgow scales ½'', 1'', 3''=1'-0''. Source: Mitchell Library, Glasgow.

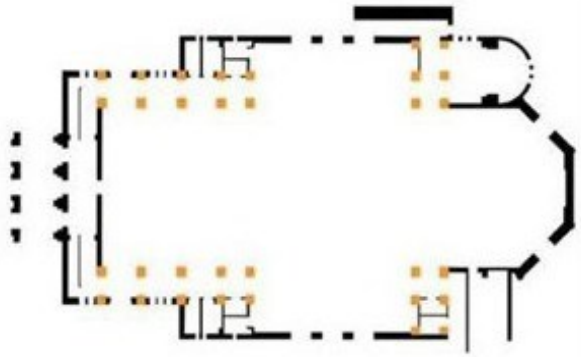


Fig. 71 Plan diagram highlighting structural piers at St. Anne's, Dennistoun (1931-3), Gillespie, Kidd & Coia. (Panayiotis Paschalis).

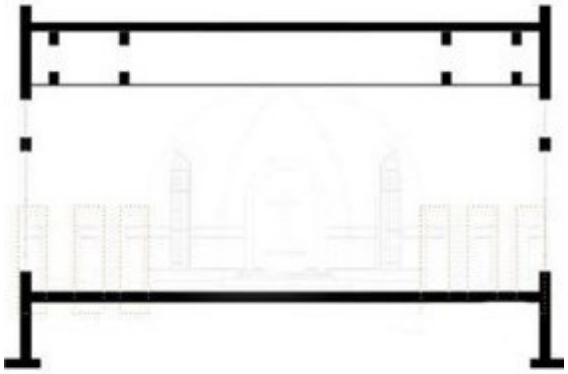


Fig. 72 Cross sectional diagram highlighting structural piers at St. Anne's, Dennistoun (1931-3), Gillespie, Kidd & Coia.

In heavyweight, planar form, Sacred Heart, Cumbernauld, has a massive, cubic envelope, which is emphasised by the rendered finish on both the interior and exterior. The sense of solidity and weight expressed by the deeply recessed entrance on the angle, surmounted by a substantial band of render in a darker shade, is suggestive of a very large lintel to support the monolithic character of the blank wall above. As the façade transitions into the north-east front, it bulges out into a shallow bay with angled sides. This modulates what is effectively the principal elevation, which is completely devoid of fenestration. It also contains within it the choir gallery, and in pulling away from the principal volume, it creates the roof-level slot discussed previously in terms of its indirect lighting.

In contrast to this, St. Benedict's, Drumchapel demonstrates an unconventionality of section, which makes it distinctive amongst the later work of Gillespie, Kidd & Coia, even if it was simply a development of earlier themes.

Photographs of the demolished church expose its compelling oddness – standing on a relatively compact site on the south side of Drumchapel Road near old Drumchapel,[299] in North-West Glasgow, it formed part of a complex which, apart from the church, included a hall and presbytery; both attached to the church in between. All three components displayed that strong sectionally driven design featuring pairs of monopitches of unequal heights; however, where this was seen as a very conventional representation of the, by then ubiquitous, device within the firm's portfolio in the church hall and presbytery, in the church itself, this had developed into something altogether different.

The external brick walls of the church again conceal the elegant glulam roof structure within. This created the sweeping curve of the roof up to a point that emphasises the building's centrality of layout. The timber structure employed similar split posts as those used at St. Mary of the Angels, Camelon, with decorative beam ends echoing those used in St. Peter's Seminary, under construction simultaneously.

The lightweight structure of St Margaret's, Clydebank (figs. 73 & 74), is constructed within a low building where the wide-spanning roof is supported by a steel space-frame, with only slim steel posts transferring its load to the ground around its own periphery. The gridded structure in conjunction with the strongly defined planar glazing reinforce the splayed seating around the sanctuary. As an example of exposed, repetitive lightweight steel structure, St. Margaret's is unique within the firm's oeuvre. Exposed structural steel was, however, used again at St. Columba's, East Kilbride (figs. 75-77), which although has a harled masonry external structure, internally exposes two large castellated steel roof beams, which unify the two 'halves' of the building and direct focus towards the altar.

[299] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p.84.

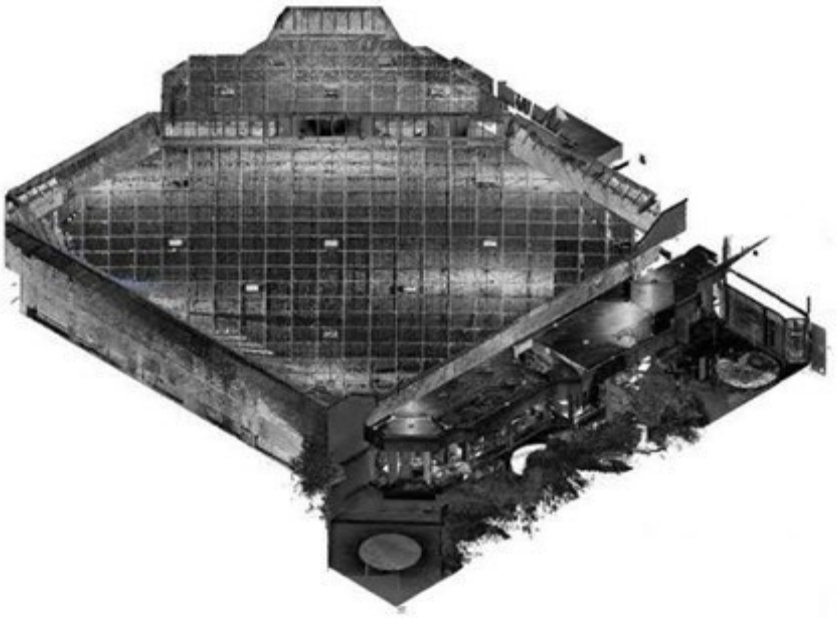


Fig. 73 3D image showing spaceframe structure at St. Margaret's (1972), Gillespie, Kidd & Coia.

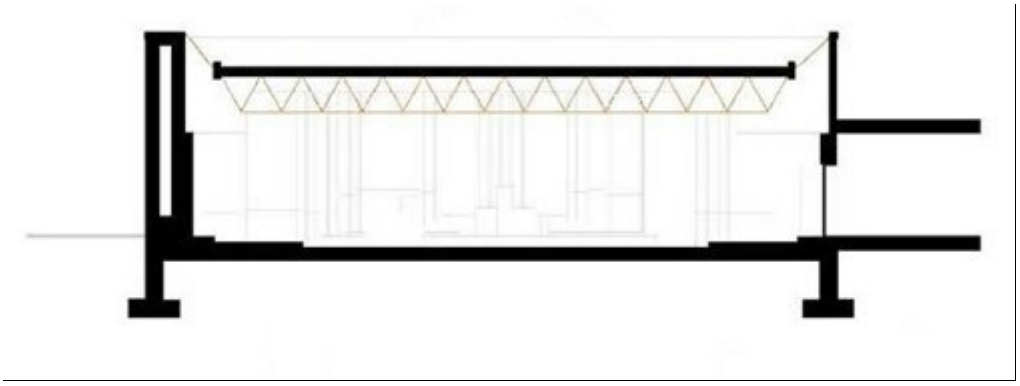


Fig. 74 Section showing spaceframe structure at St. Margaret's (1972), Gillespie, Kidd & Coia. (Christina Lipcheva).

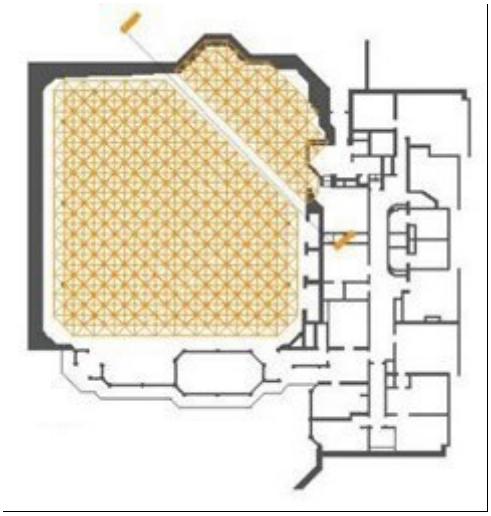


Fig. 75 Plan showing spaceframe structure at St. Margaret's (1972), Gillespie, Kidd & Coia

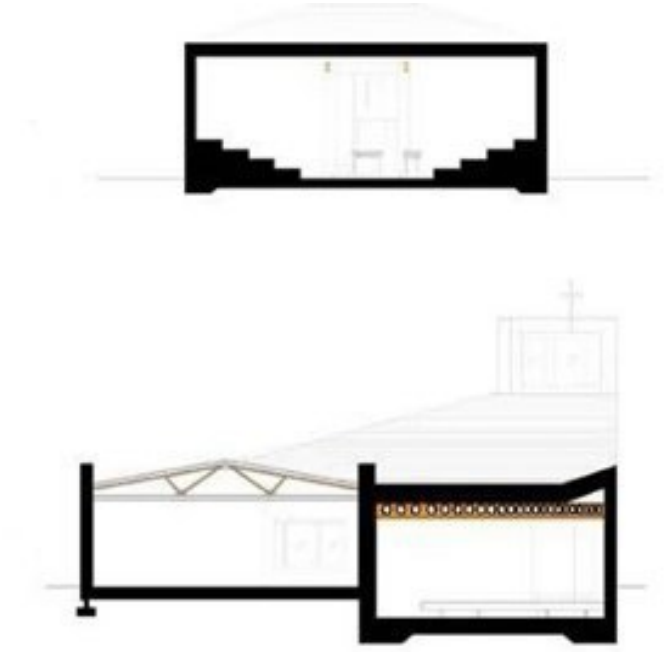


Fig. 76 Sections highlighting roof structure at St. Columba's, East Kilbride (1979), Gillespie, Kidd & Coia

Fig. 77 Plan highlighting castellated steel beams at St. Columba's, East Kilbride (1979), Gillespie, Kidd & Coia

Conclusion

Overall, structural concepts aligned with the broad groupings of directional or centralising structures, although this did not necessarily always relate to the direction in which seating faced. Of the directional type, structure was either integrated with the building's cross-section, which occurred mainly in the early examples of St. Patrick's, Greenock and St. Peter in Chains. Structural expressivity began in the reinforced concrete rib frames of St. Columba's, Woodside, and later at St. Laurence's, Greenock. This was an idiosyncratic use of structure reminiscent of modern British examples such as the Royal Horticultural Society Floral Hall, and that followed international secular and ecclesiastical developments in the use of structural concrete, for example at Perret's Notre Dame du Raincy (1923).

The use of planar surfaces, often combined with flat ceilings, began at St. Columbkille's, and was used again in the intensely directional orthogonal spaces of the post-war basilicas. Articulation of planar surfaces then combined with lighting concepts to produce dramatic internal spaces that emphasized massiveness or solidity.

Centralising structure was either planar or lightweight and tended to reinforce focus on the connection and unity between the congregation and sanctuary.

2.6 Volume: Tectonic Arrangement and Massing

Discounting the attached presbyteries of the first churches, which were not consciously part of the experience of the route into the building, there are three dominant categories of volumetric design. The first considers those churches contained substantially within one volume, the second examines those which physically separated constituent elements of the church into more than one volume, and the third addresses the majority, which consisted of an array of spatial volumes that were physically connected but prominently articulated.

Of the first, St. Anne's is linked to some of the later examples, notably Sacred Heart and St. Margaret's, Clydebank. The second consists primarily of St. Charles Borromeo and St. Bride's, East Kilbride, while the third is defined by the long basilican churches with sub-volumes often separated by expressed internal structure, churches that articulate smaller volumes with glazed walkways, and those that are homogenous in plan, but articulated into two distinct volumes in building section.

Hierarchically, a sense of a building's volume is one of the first attributes to allow the observer an impression of its underlying spatial organisation, and of the parts to the whole. It also relates to site and potentially the wider context. Geidion summarises the impact of volume in architectural composition, as a product of its component parts;

Shapes, surfaces and planes do not merely model interior space. They operate just as strongly, for beyond the confines of their actual measured dimensions, as constituent elements of volumes standing freely in the open.[300]

This section will discuss the array of volumetric designs in the work of Gillespie, Kidd & Coia.

Single volume churches

[300] Geidion, S. (1967, reprinted 1974) *Space, time & architecture.* 5th ed., Cambridge, Massachusetts: Harvard University Press, p. xlvii.

Only a small number of schemes consist of one significant volume, and can be seen at the beginning and end of the firm's oeuvre. Behind the set-piece façade and hidden roof structure, St. Anne's (fig. 78) is a broadly homogenous volume consisting of a main barrel-vaulted space with a terminal inwardly-curving facetted apse and a wide secondary intersecting barrel vault and two further, tertiary pairs of barrel vaults, also intersecting perpendicularly to the primary vault. The secondary and tertiary vaults are the side chapels and dormer windows respectively. As can be seen from fig. 78, the volumetric arrangement is effective in covering space primarily on – and of – the earth. No campanile or other form of tower offsets this. In a less expressive manner, Sacred Heart, Cumbernauld and St. Margaret's, Clydebank envelope all liturgical accommodation within a single volume. Sacred Heart (fig. 79) is contained within a massive, cubic, planar envelope, which characterises both the external and internal aesthetic of the wall surfaces. In a similar way, St. Margaret's (fig. 80) is geometrically strong, but lies low and broad within its residential setting. This building eschews many of the vertical accents and sectional experiments that had characterized many of the firm's previous ecclesiastical work. Instead, a gradual and modest elevation of the building mass towards the sanctuary area describes the hierarchy of space.

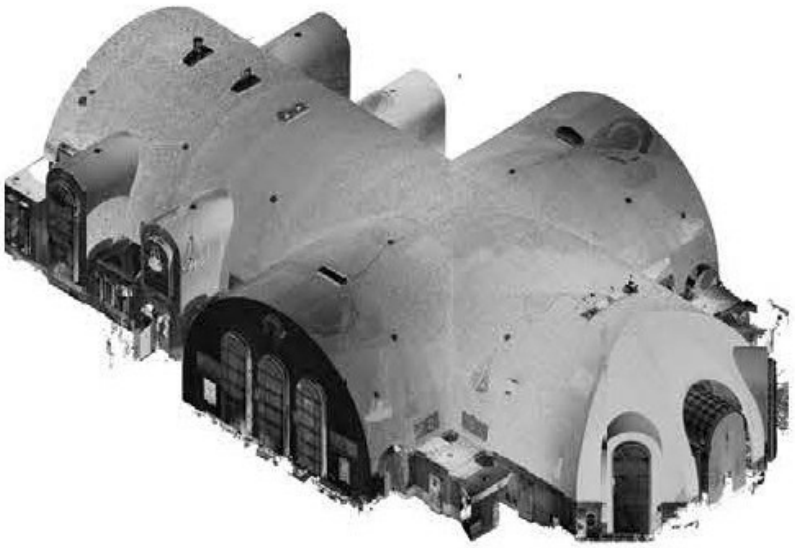


Fig. 78 St. Anne's imaged from below the roof structure, showing the volume created by the hierarchical interlinking of barrel vaults. In collaboration with Hobs Studio, Glasgow.

Fig. 79 Aerial photograph showing the taut outline of Sacred Heart, Cumbernauld. Courtesy of HES.

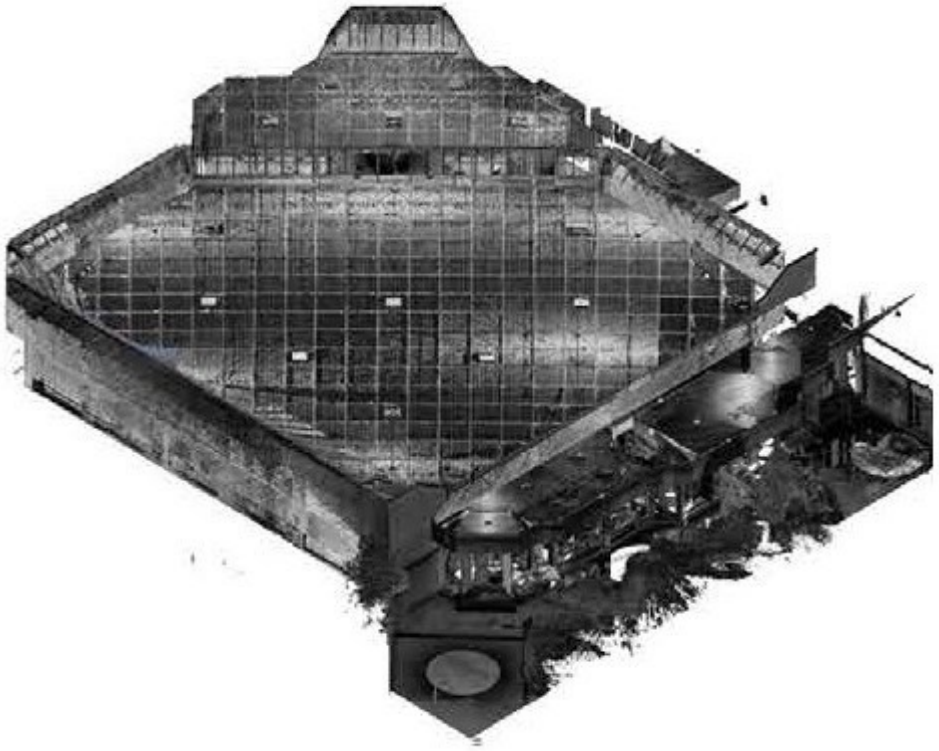


Fig. 80 Wall planes and structure enveloping volume at St. Margaret's. In collaboration with Hobs Studio, Glasgow.

Separately articulated volumes

There are only two instances where liturgical functions are completely separated into separate volumes. At St. Charles Borromeo, Kelvinside (fig. 81) and St. Bride's, East Kilbride (fig. 82), the campanile is expressed as an independent structure. St. Charles Borromeo consists of a design parti that is based more generally on the distinctive expression of its components, but sees the total separation of the campanile. The main body of St. Bride's, as discussed, is more homogenous, but uses a separate campanile as well as other, ancillary buildings to demarcate external space.

St. Charles Borromeo is one of the most striking of the practice's ecclesiastical schemes as it begins to break down many of the church's component parts into an arrangement of functions expressed individually. This decomposition of elements is not a function of a cramped or otherwise awkward site; rather, a deliberate examination or manipulation of distinct areas of the church's liturgical programme, with the campanile extricated to form a completely separate element. Along with the baptistery and priests' sacristy, it integrates the extant presbytery – a detached Victorian villa – into the site design.

Both churches are built on elevated sites, and to some extent use their heavily articulated components as landmarks. In their elevation and massing of different volumes, these churches could be described as picturesque. The campanile of St. Charles Borromeo is an open, slim concrete frame marking the highest point of the composition. By contrast, the south side of the church falls away, descending by another storey to take account of the level change between Kelvinside Gardens and the streets to the south. A tall elevation is created, where the concrete frame still regulates and reddish-brown brickwork gives the impression of a cliff or quarry-face, despite the regularity of the material elements. This elevation does not merely present a flat façade, but one that is animated through secondary elements. An angled three-bay, flat-roofed volume, two storeys high and containing a side-chapel, shrine and confessionals, breaks off the main body of the church, perturbing the otherwise orthogonal regularity of the other building elements. In characteristic language, this volume is at once a geometric anomaly and an integral part of the church's distinct vocabulary. The employment of expressed confessionals is also seen at Holy Family in their almost modular projection in a horizontal oblong extrusion, one storey above ground level on the north side. The box-like structure stretches the length of three structural bays, but actually cantilevers beyond them and hence beyond the main north face of the building.

Of all of the firm's late-phase churches, St. Bride's, East Kilbride is one of the largest. Built on a steeply banked green site between Whitemoss Avenue and Platthorn Drive, in Scotland's first New Town, the massive red brick sculptural bulk of the church and peripheral elements of detached campanile and presbytery, and attached sacristy, would have had a considerable impact over the surrounding residential areas. Although not a tremendously large site for the great masonry mass of the church, the sense of experience on entering is enhanced by virtue of both its elevation and linking of architectural and landscaped components.

Fig. 81 Elevated massing of St. Charles Borromeo (left) with separate framed campanile (right)

Fig. 82 Elevated massing of St. Bride's, East Kilbride, with separate solid wall campanile. Courtesy of HES.

Prominently articulated volumes

The visual separation of building volumes through geometric articulation began with St. Patrick's, Greenock, and was used repeatedly throughout the 1930s. To start with, stair enclosures and entrance fronts were designed in this way. Subsequently, the focus turned to campanile, and then to baptisteries in the 1950s and '60s.

The simplification of form and the clear definition of units of space was first used in 1934 a St. Patrick's, Greenock, to create the effect of a semi-abstracted composition of simplified, well-defined almost platonic forms. These are seen in the dominating, almost triangular elevation and hemispherical, asymmetrically placed front stair tower. The hemispherical volume resurfaced at St. Columbkille's, in the side chapel to the south of the west transept. Intriguingly, the projection of the side chapel is reconciled with the main body of the church in an elegant semi-circular sweep; much like the semi-circular features on the Roman Catholic Pavilion (fig. 86) and the Palace of Industries North.[301] It also recalls the symmetrically-positioned stair towers on the front elevation of St. Columba's, Woodside, which, in contrast to St. Patrick's, Greenock, are symmetrically placed and finished with a low-pitched roof. The stair enclosures of St. Columbkille's itself flank a central entrance volume, and allow access onto the gallery above the narthex. Rather than the curved forms of St. Patrick's, the Roman Catholic Pavilion and St. Columba's, they have been translated simple orthogonal, square volumes with broad-eaved, hipped roofs. These volumes turn the corner to begin the massing of the side aisles with projecting confessionals.

St. Columbkille's (fig. 83) has a sense of earth-bound solidity in its box-like, flat-ceilinged main volume, which incorporates the semi-circular apse within it. It is preceded by a tall but shallow, plain, rectangular brick volume, which is connected but visually distinct. St. Columba's (fig. 84) also exhibits visual detachment of its principal elevation to the main building, in height and in form. Here, the boxy, oblong form overshoots the mansard roof behind, and is completed with a cornice and a low-pitched hipped roof which is virtually invisible from the immediate vicinity of the church.

St. Peter in Chains (fig. 85) is a substantial edifice, characterised by the abstract, haunting volumes of its tall entrance volume and attached campanile. The building is plain and austere with expanses of empty brickwork, save for the placing of doorway and window openings on the principal elevation. In this respect it represents a continuing development

[301] Glasgow Empire Exhibition, 1938

of the abstract brick volumes tested at St. Patrick's, St. Columbkille's, and St. Columba's, and played out unreservedly at the Roman Catholic Pavilion. Unlike the Pavilion, however, St. Peter-in-Chains is, like the firm's first three churches, executed in brickwork. Comparison of the church's campanile has frequently been drawn with Ragnar Ostberg's Stockholm Town Hall, referred to in *Practice*.

The Roman Catholic Pavilion comprised three principal elements, only one of which was the actual church element; the altar-shrine, which was the only part of the structure to be roofed over and which was positioned at the opposite end to the entrance. The tall, curved form of the shrine intersected with an open-roofed 'nave' element, which was not actually part of the worship space at all, but an oratory – an open part of the pavilion, which served to focus on the shrine. The entrance was situated beneath a tower; itself recalling Tait's Tower at the top of the hill and was constructed as a vertical triangular tube with a tall, flat fin overreaching the top of the triangular element. The plainness and simplicity of the tower volumes of the Roman Catholic Pavilion and St. Peter in Chains, and their relation to the other volumetric components of the buildings appears to re-surface, again in some of the later work of the firm, particularly St. Bride's, East Kilbride, although at a much increased scale.

The Roman Catholic Pavilion is suggestive of a developing experimentation with abstractionist forms and of a preoccupation with the treatment and expression of different elements of the church in connection with different parts of the liturgy.

A preoccupation with simplified, abstracted geometry came at least as early as St. Patrick's, so its overt application at the Empire Exhibition, where the buildings were temporary, is not particularly surprising. The bow-fronted element, first used as a flat-topped, offset stair enclosure at St. Patrick's, and then as hipped-roofed symmetrical stair enclosures at St. Columba's, assumes central importance at the Catholic Pavilion, in both its singularity and in its function as the shrine element of the composition of entrance tower, exhibition space and 'church'.

Fig. 83 Aerial photograph showing the visually distinct but attached front elevational volume of St. Columbkille's, Rutherglen

Fig. 84 Photograph showing the hemispherical stair, and tall entrance volumes of St. Columba's, Woodside

Fig. 85 Photograph showing the abstractly composed tall entrance volume and campanile at St. Peter in Chains, Ardrossan.

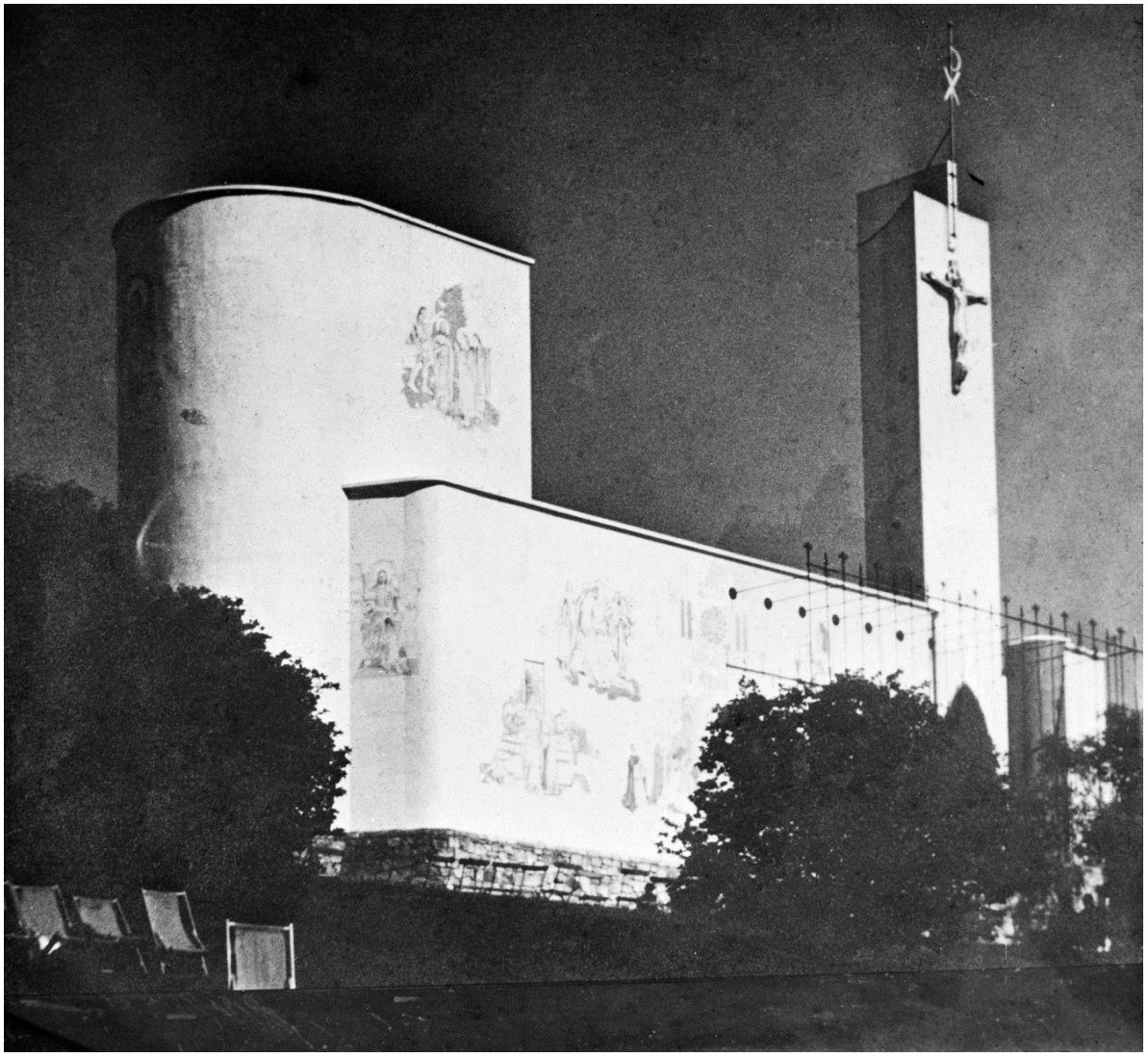


Fig. 86 Photograph showing the connected but sharply articulated volumes of the Roman Catholic Pavilion

After the Second World War, Holy Family, Port Glasgow (fig. 87), further developed its campanile into a semi-autonomous volume, connected to the church by a lightweight glass structure. The large, plain brick tower commands the north-western corner of the site. It is virtually blind and devoid of relief from its monolithic bulk, except that it is quite carefully conceived as a squared, elongated 'arch', with two massive, load-bearing walls on the east and west sides, and a connecting flat roof. The north and south walls, slightly recessed, are treated as infilled elements, and do not meet the roof; instead stopping short to form a square opening about as tall as the width of the open space between the loadbearing walls, creating an unobstructed void for the ringing of the carillon. The coupling of the church's oblong box-like form with the articulated campanile and presbytery evokes a machine-like quality, and suggests a flexibility of composition and a potential for development or formal evolution, previously absent, with the exception of the Roman Catholic Pavilion. This aesthetic is reinforced by the placing of areas of glazing

such that they accentuate the framed structure of the building, sometimes inhabiting the full width of a structural bay, which occurs in the first and last bays on the north side of the church. The striking composition is quite abstract, and prefigures the prominent articulated campanile of St. Michael's (1952-54) and St. Joachim's (1956).

Holy Family's campanile and church form part of a distinct complex or ensemble of built elements along with the presbytery, separate church hall and later extension housing a side-chapel. This separation of ecclesiastical elements is further broken down into the ensemble seen at St. Charles, Kelvinside, which followed the completion of Holy Family in 1959. Similarly, the enclosed external space, whilst not as formal, anticipates the heavily choreographed piazza of St. Bride's.

Similar geometrically connected distinct volumes were also seen in later churches such as St. Joseph's, Faifley, which was effectively a brick and timber cube, forming the central focus of a small complex of associated buildings around a courtyard. It was also designed with a 'piazza' area in the space between the church, church hall and presbytery forming a paved ante-space on approach to the main entrance to the church. The main entrance was set in between these two peripheral zones; a lowered, recessed, glazed zone approached by a short flight of steps from the piazza. The baptistery was conceived as a tall rectangular volume with a hemispherical end – a device used also at St. Charles's, and originally at the Roman Catholic Pavilion. It has no fenestration other than that of the clerestorey. The Lady Chapel is a similarly tall volume of space, though this time the long sides of the rectangle are tapered towards the hemispherical end, which this time protrudes just beyond the north-east (side) elevation.

St. Joseph's was conceived in a similar vein to Holy Family, being a large church forming an ensemble with its presbytery and separate hall, executed as a grouping of interconnected abstract volumes clad in brownish brickwork. Like Holy Family, it features a campanile, but one, which is not so large or prominent, instead, recessed into the south-east corner of the principal elevation, in a similar manner to St. Peter-in-Chains.

The main body of the church to which it is attached is a simple, shallowly-pitched oblong volume, with expression granted to the sanctuary by way of a narrower projecting element at the north-west end. Peripheral liturgical elements are arranged around the main volume and are expressed additively as low, flat-roofed projections interacting with elevations on both long sides of the nave and behind the sanctuary wall.

Fig. 87 Photograph showing the prominent campanile at Holy Family.
Leading to the main entrance is a stepped precinct area. Courtesy of SCRAN.

In the early 1950s, a series of basilican churches used spatial volumes hierarchically around the periphery of the church. St. Matthew's, Bishopbriggs is a simple, pitched oblong box with a much smaller, pitched oblong box at the front, and a series of flat-roofed accretions housing ancillary spaces, on the periphery.

The main volume is composed of eleven bays with tall, narrow windows, subdivided into sets of five smaller rectangles mirrored about a central vertical muntin. On the south side, a side-aisle projects from the seventh bay along, curiously expressed as an additive flat-roofed element. The beauty of St. Matthew's lies in its volumetric reductivism and expressive hierarchy of space, various sized spatial volumes and pitched and flat roofs differentiating the principal liturgical spaces from the ancillary.

St. Eunan's, Clydebank is a similar model to St. Matthew's, Bishopbriggs, although slightly larger. It is again expressed volumetrically as a pitched rectangular block housing the main liturgical space of nave and sanctuary, with the entrance lobby in a smaller attached,

pitched block to the western end of the church; and ancillary spaces including side-aisles and transept-like projections housed under flat-roofed aggregations around the periphery.

Following in the series of simplified, basilican-plan early 1950s churches, St. Kevin's, Bargeddie (1950) largely follows a similar pattern of long, narrow liturgical space with pitched roof, subtle definition of the sanctuary through slight recesses on both of the long sides of the nave, and a smaller entrance volume also with a pitched roof.[302]

At St. Andrew's, Airdrie, peripheral elements are again expressed as semi-independent but attached, low flat-roofed volumes, including the entrance to the church, and the sanctuary is demarcated by a projecting volume similar to that at St. Joseph's.

Like St. Laurence's, St. Michael's (fig. 88) was one of the first of the practice's substantially sized new churches to be built after the Second World War. Refining the basilican plan with attached campanile, this church is generally more architecturally experimental in the relationship of solid building envelope and fenestration. Volumetrically, the building is again a simple pitched oblong with side-aisle, confessionals and ancillary rooms expressed additively with flat roofs, giving prominence to the main liturgical space of nave and sanctuary.

Fig. 88 Photograph showing the prominent campanile and experimental use of glazing at St. Michael's. Author.

[302] The original church has been altered in recent years by James F. Stephen Architects.

Another basilican example, St. Laurence's (fig. 89) contrasts with the immediate postwar churches, which although interesting, are austere by comparison. The War Damage Commission allowed for the re-building of the former church, which had suffered bomb damage during the raids on Clydeside in the early 1940s.[303]

Its massing and silhouette loom over its small site, and the steeply-sloping pitches of its roofs increase the sense of elevation begun by its topography. Volumetrically it is something of a hybrid; both referring to recent patterns of simply pitched oblong with flat-roofed peripheral spaces, while at the same time employing the use of steeply- pitched lean-to roofs over side-aisles and confessionals. St. Laurence's also revives the earlier configuration of church and attached presbytery, seen at the majority of the 1930s schemes.

The south elevation expresses a side-aisle and confessionals as part of the overall outline of the building rather than the flat-roofed accretions of St. Michael's and several other of the designs of the early 1950s. However, the side-chapel at the western end is expressed as a flat-roofed structure.

The sanctuary is the key feature of this church. It rears up – a great, gabled, inhabited column of brick – like a Scottish crow-stepped church tower, but in place of the stepped gable, simply a parapet with a gable in between in its two dominant elevations.

[303] Coia, J. (1949) Letter to Rev. John Daniel.19th April. REF. JAC/JTB.

Fig. 89 Photograph showing the dominant pitched volume of St. Laurence's, with flanking ancillary spaces. Note the visual detachment of the sanctuary in the foreground

St. Martin's, Castlemilk demonstrates, as St. Paul's, Glenrothes, a more sculptural approach to the long list of rectilinear 'basilican' layouts that characterise much of the practice's work from its 1930s beginnings to the 1960s. It features a gentle wedge-shaped structure with attached but separate presbytery. There is no attempt here to reconcile different elements within the overall outline of the ensemble, as at St. Mary of the Angels; yet the main character of the ensemble – the church itself – behaves quite idiosyncratically in its near symmetry of outline and peculiarity of form.

The three-storey presbytery is the first component in a series of three buildings, which together form the church. The eastern volume of the presbytery is flat-roofed and therefore terminates below the adjacent monopitch. This is actually the constituent that connects to the main church building in a similar manner to that used between the church and campanile, at Holy Family.

At St Martin's, the baptistery is distinct from the church, but fills a gap between it and the presbytery, whereas entry into St. Mary's, Borrowstouness, was via a glazed porch, which was the element of articulation between the main church building and the baptistery. The baptistery itself was conceived as a small space terminating in a

hemispherical wall, and topped by a steep monopitch roof. A similarly expressed baptistery exists at St. Charles Borromeo.

St. Mary of the Angels, Camelon followed the heroic distillation of structure and volume of St. Charles's, and what is striking is the design paradox that it displays. On one hand it is a development of the firm's brick-built basilican churches, yet on the other, it appears to deny this by virtue of its pared- back, flattened aesthetic, such that if previously one had been given clues as to the building's function, at St. Mary of the Angels these are largely absent. Even the presbytery is joined to the church in a way which casts a certain measure of ambiguity – while Holy Family, St. Charles's and the Roman Catholic Pavilion separated out the various components of the ecclesiastical whole (even St. Paul's, Glenrothes did this to some degree), at St. Mary's, these are largely supressed.

The two principal levels of the church relate to connected but distinct areas within. Both flat-roofed, the higher portion houses the nave, whereas the lower level relates to a substantial side-chapel. This relationship of nave to flat-roofed side-chapel has been seen many times before in the practice's history, but here the two elements are treated in the same way, as if to emphasise their connectedness and a present if less pronounced hierarchy.

The longer west façade is also mediated in height by the imposition of the lower volume against the taller. When the west wall meets the presbytery at the church's south end, the aesthetic is very similar. Indeed, the 'L'-shaped house forms part of the ensemble rather than being detached from it. No distinction in height is made either; in fact, the clerestorey level continues here, manifesting itself as high- level glazing within certain rooms of the house.

The monopitch of the east side of Our Lady of Good Counsel rises steeply; spanning the width of the main liturgical space before dropping into a dramatic, vertical clerestorey space. Ancillary spaces are grouped into a secondary zone, lateral to the primary.

There is a disjunction between the external representation of the dominant and the subordinate, and the internal expression of the entirety of the space. Some of the ancillary functions are simply volumes within a greater volume; enclosed by a brick wall with rounded corners, the confessionals do not meet the roof, allowing its clear, unbroken angled plane to sweep overhead, from south to north. Instead, a small curved stair gives access to a choir gallery above, backed by a wall that does reach the ceiling – this being the only element which is completely separated volumetrically from the main liturgical

space – and housing the sacristies. The Lady Chapel beyond is even less defined than the confessionals, being essentially open to the nave, and only defined by a small change in floor level. The larger volume of the church is defined not only by its higher ceiling level, but also by the six massive, diverging concrete columns that support the great roof.

St. Benedict's, Easterhouse, is again treated as conjoined volumes featuring two monopitch roof structures – one higher than the other. This time, however, the join in the two volumes is central to the main liturgical space. The entrance is at the lowest edge of the lower monopitched volume, and effectively forms part of the ancillary zone.

Conclusion

Single volume churches tended to relate to centralised structures, and characterise the earliest and some of the later schemes. Those with separately or prominently articulated volumes, however, were often either a product of hierarchical emphasis, such as the churches with tall entrance fronts, modern theories of architectural experience and discovery through the *promenade architecturale,* particular emphases on liturgical arrangement such as the position of the baptistery within the liturgical sequence, or the highlighting of the sanctuary through tower-like volumes.

2.7 Materials

Although initially following a general interwar trend for constructional economy and pragmatism, Gillespie, Kidd & Coia were remarkably consistent in their use of materials such as brick and concrete, throughout their decades of practice. The aspect that developed, however, was the visual prominence that they gave to one material over another. For example at the start, even though St. Anne's employed the most up to date steel construction to form the roof, it was entirely hidden by the smooth, curved vaulting of the internal volume, and externally brickwork was used to demonstrate the ability of the material to be highly crafted.

In the immediate postwar era, the revealing of materials previously thought of as subservient followed general modernist principles of structural pragmatism and 'honesty', while brick continued to be used, albeit in a more modest way as structural infill.

In the late modern period of the 1960s, certain churches such as St. Bride's returned to a wholesale use of structural and facing brickwork, in a highly original, monumental way. In contrast, the final parish church, St. Columba's, East Kilbride, reverted to covering up solid, generally featureless external walls with render, first used at the Roman Catholic Pavilion and returned to sporadically over the intervening decades.

A general pattern in Gillespie, Kidd & Coia churches sees facing brickwork and stone used for the most complex elevational detailing, for example the stereotomy of St. Anne's and the low-relief of the brickwork of St. Bride's. By contrast, concrete framework is used to legibly demonstrate an interrelationship of structure to internal space and volume, while render describes either external canvas, as at the Roman Catholic Pavilion, or introspection as at Sacred Heart and St. Columba's, East Kilbride.

Construction material choice necessarily affects other design considerations such as type and placement of apertures, and hence glazing, light, and internal ambience. However, as will be seen in the following examples, a predominantly brick building did not necessarily mean smaller windows, if, for example, combined with the concrete frame of St. Columba's. Equally, small, punched geometrical openings were used for the relief of mass brickwork at some of the models of the 1950s. The question of what to do with solid material mass unrelieved by fenestration equally became an interest as the 1960s progressed.

In cost terms, Gillespie, Kidd & Coia were acutely aware of restrictions in their schemes, for example, shelving their initial proposal to gild the ceiling of St. Anne's. Other instances of adapting material choice to suit financial and restrictions and availability occurred again a St. Anne's in the internal fixtures. In a letter from Coia to Archbishop Mackintosh in June 1931, an addendum to the main subject of contractor lists and updates on the preparation of pricing schedules, Coia cautiously refers to a sketch drawing for the Sanctuary. He is keen to reassure the Archbishop, who had recently had the unenviable task of streamlining the Archdiocese's finances, that the expense of materials had undergone careful consideration;

(we) would point out that no marble other than the columns, caps and bases of the Baldachino has been used as a material of decoration. [304]

[304] Coia, J., Coia letter to the Archdiocese, 19th June 1931

He further highlights his awareness of the cost connection between this and the other elements of the build, emphasizing its preliminary status.[305]

An example of material substitution occurred in the structural materials to build St. Laurence's, which changed from steel to concrete due to post-war material shortage.

The following discussion analyses the material language and detail of the firm's ecclesiastical work and is organised according to dominant material characteristics.

Brickwork

With the exception of the Roman Catholic Pavilion, all of the 1930s schemes were executed in brick. The 1930s saw a general increase in the acceptance of brickwork, of varying shades and sometimes with contrasting mortar, in church design across numerous denominations. This was perhaps a sign of more contemporary relevance during a period of economic austerity, social and urban change, and progenitor of design language versatility, as Proctor notes[306].

The entrance elevations to the 1930s churches employ brickwork in different ways, gradually developing the hierarchically ordered, simplified classical frontage of St. Anne's to plainer, more abstract entrance volumes, remarkable not for their detail but in their material massing. St. Anne's (fig. 90) is a brick-built church surmounting a stone-block plinth, which countered the pedigree of pure stone, hitherto favoured in ecclesiastical

[305] In a series of letters between Gillespie, Kidd & Coia and the Archdiocese of Glasgow, between May and July 1931, it is possible to gauge a sense of the relationship that the firm had with the Archdiocese at this inaugural stage of their collaboration. Much of the correspondence is addressed to the Archbishop's secretary, the Rev. James Ward, and deals with the tender process of pricing the building work at St. Anne's. One of the letters, dated 1st May 1931, is addressed directly to Ward, (see Coia, J. (1931) Letter to the Archdiocese of Glasgow. 1st May. Source: GSA Archives) a further two, dated 11th July 1931 and 13th July 1931, are addressed to him but for the Archbishop's approval; (see Coia, J. (1931) Letters to James Ward. 11th & 13th July. Source: GSA Archives) and one is addressed directly to Archbishop Mackintosh himself (see Coia, J., Coia letter to the Archdiocese, 19th June 1931. Source: GSA Archives). It is apparent from surviving records that a degree of respectful communication existed between architects and Archdiocese, and it seems reasonable that this was so at other stages of the project for which no documentation exists. We may also infer both that the Archdiocese had placed strict cost control on the project from an early stage, and that Gillespie, Kidd & Coia were at pains to exercise financial sense.

[306] Proctor, R. (2014). *Building the modern church.* Farnham: Ashgate Publishing Limited, p.63.

buildings in Glasgow. Composed of varying architectural inspirations, the principal and side elevations differ from each other, and give limited clues to the interior form and ambience. The church's Italianate front elevation has been well documented,[307] but it is only loosely so inasmuch as the classical motifs employed by Gillespie, Kidd & Coia are picked out in a paler stone and muted, simplified or stylized. The west front addresses Whitevale Street in a very particular way that sees a gable end almost transformed into a tympanum, raised slightly above the main body of the nave. The width of the front elevation reduces above the level of the entrance, and simplified scroll brackets reconcile the resultant stepping in of the facade. Rogerson connects these to Santa Maria della Salute in Venice,[308] but there may equally be a historical precedent in the scrolls that mediate the different widths of the top and bottom volumes of the church, at St. Francesca Romana, Rome, or on Giacomo della Porta's façade of Il Gesu, Rome. The referencing of such motifs in Gillespie, Kidd & Coia's first church establish a strong re-assertion of Catholicism in Glasgow, following the re-establishment of its Archdiocese in 1878 and more particularly the installation of Archbishop Mackintosh and Pius XI in 1922; churches such as Il Gesu becoming a model for the Catholic Church during the period of the Counter-Reformation. Watters suggests that the 'Gesu' similarity existed even before Gillespie, Kidd & Coia's churches, in those designed by Pugin & Pugin, but less directly and more in the aesthetic generated by their imposing, assertive presence on the Glasgow skyline.

The tripartite entrance is expressed physically in relief from the brick facade, the top of the arches even being tiled to reflect their exposure to rain. Again, these are executed in stone, which contrasts to the mellow russet of the long, deeply striated Roman-style bricks.Each of the arched entrances is connected to the next, so that they are read as one entity rather than as three separate openings in the façade; a tryptich, in effect. Between this and the gable is a small, centrally positioned circular oculus window, complete with spokes and central ring, framed with radiating brickwork.

The facade is completed by a pediment – again, detailed in stonework, and broken at the apex with a carved stone figure of the Madonna and Child by Archibald Dawson,[309] broken also along its horizontal element. The overall dynamic is horizontal – the relatively long,

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[307] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, pp. 18-20.

[308] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, pp. 19.

[309] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, pp. 19.

low, church; the sweeping hipped roof of the presbytery, and emphatic linearity of the brickwork. Yet at points, this is in contention with the strong vertical accents of the dormer windows on the church.

The crisp expanses of brickwork with recessed mortar joints take on a sharply orthogonal quality in places, similar to Frank Lloyd Wright's controlled use of brick, and Piacentini's intensely striated brickwork at Cristo Re (1924-33), though the Italian architect succeeded in creating a regimented bas-relief effect by the slight projection of alternate, three course-high bands of brickwork.

Materially St. Patrick's, Greenock again is faced in reddish brickwork, though not the expressive Roman-type bricks and raked back mortar used at St. Anne's. The roof is, again, very visible, and clad in slate. There are two principal axes at St. Patrick's – horizontally via the nave of the church and very emphatically through that almost gouged out vertical of the principal facade. This generates a dynamism and visual concentration on an otherwise plain, brick wall. Here, rather than the grouping of three arched entrances as at St. Anne's, there is a mirrored pair of doorways, recessed into the wall and framed by concentric brickwork. A tall, sculpted stone panel of St. Patrick simultaneously divides and unifies the entrances; rising elongatedly to meet two narrow lancet windows above. The stone panel is recessed into the facade, and framed by two vertical strips of finely detailed, articulated and chamfered brickwork.

The tall entrance front of St. Columbkille's (fig. 91) has substantial parapets all round, increasing vertical accent and purity of form. This time, three separate round-arched doorways make up the principal entrance; their architraves crafted in pale-coloured, curved-profile carved stonework, in a similar manner to St. Columba's (fig. 91). Above, five round-headed windows herald a departure from that familiar central, narrow vertical feature; be it brickwork or glazed. The emphasis here, rather, is less dynamic but somehow more grounded In its bulk, and with more emphasis on ceremonial presence within its locale.

A curious mixture of brick craftsmanship quality exists at St. Columba's; perhaps a result of the slightly ad hoc nature of the procurement of bricks, paid for at sixpence a piece, by the families of the parish; or indeed due to its completion during wartime.[310]
Its main elevation to Hopehill Road is striking, and whilst there are many familiar features – the tripartite entrance doors framed with stone architraves, and the central, vertical

[310] Plaque on St. Columba's, 74 Hopehill Road, Glasgow.

feature in a plain expanse of reddish-brown brickwork, no deference is paid to the construction of the main body of the church behind.

A tall, narrow, cross-shaped window extends from just above the stonework of the middle entrance, with familiar brickwork lining its edges, like vertically stacked dentils similar to the detail used at St. Patrick's. A square stonework panel covers the intersection of the vertical and the horizontal arms of the cross. A small cross surmounts this on the parapet above. On either side of this, rising from the very top of the stonework of the two flanking entrances is a tall, narrow, recessed panel of brickwork, capped by a Romanesque trio of round-headed arches.

The long, leaded glass slit window motif continues on the sides of the oblong entrance element, again with the flanking vertical brick dentil detailing. On the semi-circular ends of the mirrored stair enclosures, further slit windows exist, except this time, on the west side, this centrally surmounts a trio of shorter slit windows, whereas on the east side there are three slit windows of equal height. Near the top of these elements is a stone string course, above which is a horizontal line of dentil brickwork beneath the roof parapet.

A gallery at the north-east end occupies the space above the narthex, within the tall, rectangular volume; the glazed cross aperture piercing the brickwork and providing intense, focused illumination in contrast to the apse at the opposite end of the building. The wall beneath the gallery is punctured by narrow pointed arched openings on either side of a principal wide, shallow-gauged arched opening. Surfaces are plastered and painted at the apse end, at the entrance end up to the gallery, and longitudinally up to the Stations of the Cross above the side-aisles. Longitudinally, the structural bays are are delineated by groupings of five narrow, round-headed clerestorey windows, made possible by the building's concrete frame.

The plain brick massing of St. Peter in Chains develops the entrance fronts of St. Columbkille's and St. Columba's. Pointed arch features are imparted in the central main entrance and flanking windows, but their inclusion seems almost mannerist; rather than part of an integral design philosophy. The double entrance doors are subdivided into twelve square panels per door, surmounted by a pointed arched panel, also subdivided into square panels which follow the curve of the arch, giving a perspective effect. A slim cross is placed centrally within the panel, and the entire doorway is demarcated by characteristic toothed brickwork up to the level of the top of the door and spring point of the arch, after which radiating slim brick voussoirs create a pointed arch over the doorway which is exaggerated and disproportionately deep at its apex. This gesture invokes an

upward-thrusting dynamism, reinforced by a slim stonework keystone connecting to a familiar vertical brick detail up to the apex of the gable. Similar brick detailing to the doorway is applied to the small flanking lancet windows. This is the extent of detailing relating to the central entrance pavilion.

At St. Peter in Chains, brickwork is exposed internally up to the level of the side-aisle roof; thereafter being plastered and painted white. The ceiling vault is angled as if there were a mansard roof above it, yet in reality, it is nothing more than a simple pitched roof. This is the first time that such a disparity between interior and exterior forms has been displayed since the very first commission of St Anne's, where the external mansard roof was expressed internally as a barrel vault.

In continuation from north-west to south-east, in retreat from the central pavilion is possibly the defining feature of the ensemble; a tall square-profile tower, reminiscent in its positioning to Mackintosh's tower at Queen's Cross Church in Glasgow, though taller and rather more abstract. The copper lantern on Gillespie, Kidd & Coia's church has been discussed in terms of a Swedish precedent but it also seems to develop Mackintosh's slim, eccentric, hexagonal stone turret into the central crowning feature of St. Peter-in-Chains. The tower makes no concession to its position at the entrance end of the church; its front elevation is completely blind. It does, however, address the south-east corner of the site, and the approach From South Crescent Road and Saltcoats. A similar entrance doorway with identical brick and stonework detailing is inserted into this secondary elevation, but this time with a tall lancet window taking the place of vertical brick detailing; connecting visually to the lantern.

Fig. 90 Photograph showing the emphatically striated brickwork, contrast to stone blockwork at St. Anne's. Author.

Fig. 91 Photograph showing the brick massing of the entrance front of St. Columbkille's. (left) and St. Columba's (right). Courtesy of Eamonn Canniffe.

These churches use brickwork consistently on all elevations. The side elevations of St. Anne's, (fig. 92) although expressed in the same materials as the front, are surprising in their execution. Walls rise to only one storey immediately west of the transept, a mansard roof denying further height but providing the opportunity for tall, round-headed dormers. These arched windows are surmounted by the narrowest of voussoirs, seemingly flickering out from the arch, and lengthening towards the keystone. In contrast, the south end of St. Columbkille's building is uncelebrated - its blind, flat wall and hipped roof are remarkably domestic in feeling.

Fig. 92 Photograph showing the voussoir detail around the dormer window head at St. Anne's. Courtesy of Eamonn Canniffe.

The basilican churches of the early 1950s were economically more restrictive, but some still relieved plain brickwork with carved panels. St. Matthew's, Bishopbriggs (fig. 93) is entirely built of reddish-brown brick with economical pale masonry detailing. A single tall, narrow, rectangular lancet is the only focus of the front elevation, as with St. Eunan's, Clydebank, save for three stone blocks delineating the spring-point of the gable on each side, and its apex. Instead, the entrance is recessed from the most westerly plane of the building, and heralded by glimpses of two pale cast concrete panels in high-relief, by Benno Schotz, referencing 'incidents in St. Matthew's Gospel which do not appear in the other Gospels.'[311] These, along with a flat-roofed canopy, supported on slim, circular steel colonnettes, and partially infilling the space created by the adhesion of the smaller volume to the larger; create a focus on a building otherwise shy of significant architectural detail. Double timber doors stand at the threshold to the church, upward-pointing chevrons being created when they are closed. Despite its plainness and eschewing of significant and costly details, there exists a clarity and legibility at St Matthew's that can be directly attributed to its pleasing simplicity of articulated functions.

[311] The panel was cast in 1949, prior to the church's opening. See Schotz, B. (1981) *Bronze in my blood, the memoirs of Benno Schotz.* Edinburgh: Gordon Wright Publishing, p. XIX.

Fig. 93 Photograph showing the brick-built St. Matthew's, Bishopbriggs, with thin concrete entrance canopy and Schotz's cast concrete panels. Author.

The much larger example of St. Laurence's, Greenock, demonstrates an aesthetic that is both a departure from, and a development of, the clusters of Gillespie, Kidd & Coia designs of both the 1930s and early 1950s. However, St. Laurence's would have been designed only a year later than St. David's, St. Eunan's, St. Matthew's and St. Kevin's, and almost completely contemporaneously with St. Michael's. Gone is the preoccupation with the tall, rectangular entrance slab, and in its place is a façade which forms only a small parapet above the roof of the main liturgical space. Instead, what we see is effectively the gable end, with the steep pitch forming a simple but significant triangular top. The end walls of the side-aisles contribute to the composition of this elevation, appearing almost as buttresses to the central portion of the façade. The triangular motif, with obvious reference to the Holy Trinity is emboldened by the central feature of the west façade; the entrance, which is a kind of simplified and weighty portico, bearing down on the twin entrance apertures. The use of russet-coloured brickwork is by now a familiar feature of the firm's ecclesiastical output, and St. Laurence's employs it unreservedly; its plainness and massing relieved by an exquisite deliberation of precisely executed apertures and details. Pale stone details frame the brickwork, emerging as cornerstones to the triangular elements, and on the projecting triangular pediment that forms the

entrance elevation, we again see the familiar vertical brick feature with dentil details. Above the division between the two entrances, two rectangular lancets provide a mirror line, which rises through the rest of the elevation. Above the two lancet apertures is the brick detailing, and then above that is a small circular aperture. On the triangular plane behind is another circular aperture that occupies the space between the two apexes. A metal cross crowns the top of the apex, and the keystone on the top has detail on it.

As mentioned, the sanctuary end that is really the key feature of this church. It is a great, gabled, inhabited column of brick – in a way like a Scottish crow-stepped church tower, but in place of the stepped gable, simply a parapet with a gable in between in its two dominant elevations. It is essentially two diaphragm walls, infilled in between. This is a tower, which rises above the level of the principal liturgical space, with a simple gabled roof, and on each side, two clusters of three – one surmounted on top of the other – curved-sided triangular windows that were first noted as the clerestorey glazing on the south facade. Again, in a similar way to the front façade, the easternmost end of the church projects beyond the end of the sanctuary tower, again in a triangular portico. Again there is a lunette window forming the east end of the tower above the portico, which is again surmounted by a cross and similar pale stone features at the corners. However, the real interest here is the way that the outermost portico is actually pulled away from the wall of the sanctuary tower and this becomes more apparent and more magnificent from the interior.

Fig. 94 Photograph showing the visual disconnection of the sanctuary wall at St. Laurence's, Greenock. Courtesy of HES.

The north side employs a similar vocabulary to the south side, with a side-aisle projection with a lean-to roof. But then, at the north-eastern corner, which is also the pivotal point at the junction between the church and attached presbytery, we see the re-emergence of the flat roof. This time it takes on something of the quality of a fortress or castellation, as it rises up to the level of the spring point of the main roof, and continues the stylized, convex

windows around the otherwise plain elevations of this lower tower – actually a stair tower. Here, another distinct group of apertures appear – this time a recurrence of the diamond-form window seen contemporaneously at St. Michael's.

Constructionally, St. Michael's consists of a steel frame, clad in reddish-brown brickwork, originally covered with a corrugated asbestos roof, due to post-World War 2 material shortages. The west elevation is the principal elevation in this case, and can be divided into three bays. The former baptistery is expressed externally as the northernmost and central bays, as two large steel-framed windows subdivided into fifteen smaller square sections – a development of the glazing at St. Matthew's – its craftsmanship intensified by the small superimposed steel cross motifs at the crossing of the horizontal glazing bars with the vertical muntins. Above, a large central, steel-framed window, sub-divided into nine unequal sections, illuminates and gives presence to what would have been the double-height baptistery. Surmounting this and overshooting the apex, a metal cross crowns the elevation centrally, supported on a rod attached to the brick façade with the alpha and omega symbols adjacent and the IHS christogram at the base. The third bay is occupied by the entrance doors, which, unlike the early 1950s cluster of churches, although recessed from the front elevation, is on direct axis with the nave and sanctuary. The entrance level is placed on an elevated platform, which meets the slope of the ground with a substantial flight of steps. The raised platform reaches a height of almost one storey as it extends past the campanile to its southernmost point. The campanile is recessed back from the plane of the west façade and a slim, flat-topped concrete canopy seems to surge out from the main façade, southwards, enveloping the entrance and coming to rest at the southern edge of the campanile. Three white-painted round concrete columns provide support along the periphery, turning into square-section piers as the canopy becomes engulfed by the west façade. Once again, the use of a flat concrete canopy to define the entrance is a logical augmentation of the small canopy-marker of St. Matthew's.

Despite several large areas of glazing, there is still an overwhelming proportion of undecorated reddish-brown brickwork, perhaps most evident on the west side of the campanile, where the only relieving feature is the vertical high-level ventilation grille, the top of which echoes its shallowly-pitched roof. But on the southern, more public side, everything changes as the campanile reveals itself to be two vertical book-end slabs, now unfortunately infilled at ground level, but above, sumptuously glazed from wall to wall and to a height of three storeys. This steel-framed vitrine is a functional expansion of the baptistery windows, but this time with subdivision into 84 square sections with the same superimposed cross detail at the juncture of the horizontal and vertical elements. A brick

infill section occupies the uppermost portion of the campanile, perforated with a grid of square apertures for the dispersion of the sound of the bells within. A thin concrete slab divides the glazing from the brickwork above, and shallowly projects from the plane of their recess to the outermost plane of the side walls. It is surely the richness and craftsmanship of the campanile that underpins the character of this church.

The external entrance podium wraps around the campanile – a slim concrete slab supported and abutted by a brick retaining wall. Another flight of steps rise to a secondary entrance behind the campanile, on the visually dominant south front. There is again a lavishly glazed steel-framed panel of square sub-divisions featuring the cross motif; a ‘shop window’ onto the liturgy, in effect. Further along the south façade, though there is an overwhelming sense of functionality, and also a strong sense of deliberation and propriety in the placement and form of the fenestration in the otherwise unornamented brick façade. Small rectangular paired apertures are a legible indication of the confessionals, housed with a sense of privacy within an exceedingly shallowly-pitched body adjacent to the nave. The side-chapel beyond is demarcated by further projection to the confessionals, and by a row of square windows – larger than the confessionals but secondary to the large areas of glazing which describe the main liturgical space. A tall panel of glazing – again subdivided into square sections, illuminates the sanctuary at the eastern end of the church. The window inhabits a recessed portion of the façade; expressed internally as a focus on the sanctuary, as was the case at St. Matthew’s. Externally the roof overshoots the recess and the end (east) wall extends to the plane of the south façade.

The north façade, though apparently subsidiary in its position on the opposite side from Cardross Road, and directly adjacent to another building, nevertheless demonstrates a degree of symmetry in the echoed rhomboidal clerestorey windows. Below these, in place of projecting confessionals, small square openings impart a sense of human scale to a wall, which would otherwise be largely blind up to clerestorey level. These low-level windows are aligned with the rhomboidal openings up to a flat-roofed ancillary zone, roughly corresponding with the side-chapel on the south side, though larger, and housing the less public functions of sacristies and WCs.

Fig. 95 Photograph showing the brick and glass campanile at St. Michael's, Dumbarton. Author.

At. St. Maria Goretti, the north elevation models itself around the confessionals, which have a familiar mode of expression to earlier churches such as St. Michael's, where they are expressed in a linear lean-to continuity; the function within somehow all the clearer for its lack of explicit external expression. Three small rectangular windows – widely spaced – are the only aesthetic relief on the lower wall, apart from a doorway of subtle presence in the connection between extension and original building, towards the east end. The north façade also deals with clerestorey glazing in a similar manner to some of the earlier churches of the decade; a small window indicates each structural bay, but this time they are square rather than rhomboidal. Towards the west end, a shallow protrusion suggests a transept, which is mirrored on the south side. Its abstract cubist character is reinforced by the transepts' complete lack of fenestration, and forming, on the north side, a continuous right-angled volume of space with the confessionals. The sanctuary end, as opposed to examples such as St. Laurence's and St. Michael's, is largely undifferentiated from the main liturgical volume. Apart from its shallowly canted west elevation, mirrored about the centre.

The south side of the sanctuary becomes obscured at lower level by a chimney stack which rises out of a single-storey flat-roofed structure that links and mitigates the transition between church and presbytery, so that each is articulated; expressed, yet part of the whole composition. The remainder of the south elevation, up to the protruding entrance volume at the west end, demonstrates a control similar to the north side, but here – as at St. Michael's, small square windows at ground floor level diffuse concerns over the disparity of human scale set against a plain brick wall.

St. Paul's, Glenrothes also uses areas of brickwork without fenestration, painted white and enveloping the south, east and north sides of the church. Even the sanctuary, although orientated to the east, is illuminated by west light. Coupled with the relative solidity of the presbytery at the westernmost edge of the complex, a distinct place of entry is convincingly suggested between this and the west façade of the church, by virtue of it being profusely glazed, in contrast to the severity of the blank elevations. Entry is further described by the widest side of the truncated wedge, an efficient if literal gesture. However, banality is avoided throughout this church by moments of direct symbolism being tempered with unforeseen manoeuvres, such as those asymmetrical elements mentioned previously.

St. Paul's employs visual contrast in the reading of its various components. This device is used to great effect here, but one which was seen also at the Roman Catholic Pavilion in its contrasting white harled walls, dark rubble base, and contrasting openness and solidity. At St. Laurence's, this was evident in the direct material separation of sanctuary from nave, and even the aborted scheme for the gilding of St. Anne's. At St. Paul's, the dominant contrast appears in the completely glazed west façade, and in the glazed west-facing elevation of the lantern above the sanctuary.

The glazed west façade is immediately intriguing given its apparent arbitrariness of design. However, on closer examination its horizontal divisions – two broad, flat timber transoms creating an unequal tripartite arrangement of glazing - appear to correspond with internal points of reference. The lowest transom echoes the height of the font, tabletops and pews within, whereas the uppermost aligns approximately with the height of the screen separating the notional narthex from the main body of the church. Glazing is a combination of clear and coloured glass, and smaller horizontal, flat timber elements set at varying levels that further sub-divide fenestration. Vertical timber divisions create modules of glazing of alternating width, this time with seemingly less reasoned placement. Mullions are in high relief and expressed on an anterior plane to the transoms, each end visible and unattached, creating an elevation that is dynamic, yet neither focused on its

horizontal nor vertical trajectory. Instead, with the sense of depth created by the positioning of the mullions, the intense, oscillating façade seems to gravitate towards the interior of the church, as a magnet towards its monochrome serenity.

A deep parapet surmounts the elevation, concealing a roof that in fact consists of a trio of triangular sections; the middle one flat, with one interlocking, low-pitched flanking triangle on either side.

The presbytery is very much a part of the architectural ensemble, but it is wholly subordinate to the church, despite the small size of the latter. Its low, single-storey presence maintains the same language as the church; white-painted brickwork with dark window frames and parapet. Fenestration on the public (west and north) side of the building has a similar air of arbitrariness as the church. Initially, this seeming lack of hierarchy shocks, but when the presbyteries of the early 1950s churches are compared with those of the 1930s, a general trend of geometrical simplification and hierarchical flattening becomes apparent. This is seen in the presbyteries of St. Anne's and St. Columbkille's, with their vertical demarcation of front entrance and principal reception rooms with bay windows, to the legible yet plain presbytery of St. Maria Goretti, to the functional ambiguity of St. Paul's.

Internally, St. Paul's advances the visitor into the builiding in the most economical manner. Having entered the building by way of the glazed walkway that connects church to presbytery, the entrance area of the church, enlightened by the glazed screen of the west elevation, has the merest separation from the main liturgical space, by way of two adjacent partitions, which neither reach the ceiling, nor the converging walls on either side of the building. Visitors are both denied a direct view of the principal liturgical focus, yet offered glimpses of the space indirectly. These brick-built screens are painted white also – and indeed all of the internal walls of the church – such that no distinction is drawn between the exterior and the interior in colour, texture or material. Brickwork projections set at 45 degrees to the principal plane, animate the screens in much the same, seemingly arbitrary way as the glazing of the west front; sometimes the projecting triangular columns that are created are one brick high, whilst others employ significantly more stacked bricks. With the coloured, deeply recessed glazing opposite, and the associated effects of light and shade, these make for an intensely sculptural ambience before entering the main liturgical space.

Beyond, a broad space, has an emphasised sense of reverse perspective; the low timber pews, the low, flat ceiling clad in dark stained timber strips, and of course the church's

angled walls, diverging as they reach the sanctuary – a surprising decision, but one which allows more of the congregation to be seated near to the front than to the back. Of course the real shape and function of St. Paul's exists by virtue of the sanctuary, centred on the east wall of the building – a brick-built projection which rises significantly above the level of the roof of the main liturgical area; a monopitch slate-covered roof filtering west light down onto the altar beneath.

Although contemporary with St. Paul's, Glenrothes, St. Joachim's reverts to the orthogonal nature of the earlier basilican churches. It is an oblong box with a shallowly pitched roof – in buff-coloured brick and grey profiled sheeting, respectively – with only the campanile for relief and focus. It is a visual and material reduction of the flat-roofed accretions of the ancillary space of previous churches such as St. Michael's, St. Eunan's, and St. Matthew's, in almost every way.

Positioned within it is the main entrance at ground level, with the campanile expressed almost as an outline, described by way of piers within the brickwork, and piercing through the roof in a hollow, pitched arch leaving carillons and sky clearly visible in the implied interior of the bell tower within. This subtraction of material and doubling of function is both subtle and incredibly intense, but although striking, it logically extends an implied practice philosophy explored from the 1930s – a Beaux-Arts rationality that relies on economy and practicality of structure, materials, form and metaphor. This subtraction of superfluity allowed the Roman Catholic Pavilion to emphasise the sanctuary in the absence of a roof above the 'nave', at San Felice da Cantalice a sense of shadowy revelation through framing, and at St. Michael's, a prototype for St. Joachim's emerges in its lofty, vitrine-like display cabinet campanile.

St. Joachim's also displays that peculiar fascination with window geometry, in a similar manner to St. Michael's and St. Laurence's, here experimenting with both rhomboids and broken hexagons.

Above the entrance doors, a sculpture in white and terracotta colours demarcates the entrance and clerestorey level, whilst the continuation of the campanile above acts as a vertical marker of entrance. This is in a similar manner to the presbyteries of the firm's 1930s churches, but at St. Joachim's the roofline is only disrupted to allow the walls of the campanile to pass upwards through it.

The 1960s returned to a use of experimentally constructed brickwork, both in structural and decorative terms. A strong example is St. Bride's, East Kilbride, beginning at the start

of the promenade towards the church. The presbytery and ancillary building housing sacristy and guild room, connected to the church, are conspicuously contrasting in scale to the church itself, though similarly employ the use of reddish brickwork. The presbytery, by way of its connected wings of accommodation, steps up the sloping site – a series of terraces with flat roofs, and glazing arranged in a continuous clerestorey ribbon, causing the copper-clad roof to levitate lightly over the top. Below this, the accommodation of the main entry level is differentiated from the clerestorey by a slight projection on all sides of the building. Fenestration below that adopts a similar mode of execution as at recent works, such as St. Mary of the Angels and St. Martins. However, here the glazing units are smaller and almost flush with the brickwork façade, rather than being recessed. Rather than seeming staid and flat, the roughness and unevenness of the multi-reddish brickwork imbues a surprising degree of interest and tactility. Again, there is no discernible pattern of placement, except that they become horizontal and ribbon-like where used for significant spaces such as the priest's suite on the west side, which faces away from the piazza. Elsewhere, patterns of glazing on the house seem to echo the varying vertical and horizontal emphases of the brick walls of the main church building; framed further by the cardinal emphases of the (demolished) vertical campanile and lowly horizontality of the presbytery itself.

Apart from the convergence of the brick paving at this largely concealed entrance, the only other humanly scaled feature occurs with the dematerialisation of the corner at ground-storey level, on the north side of the vertical entrance gap. It is sculpted into staggered columns of brickwork, the vertically stacked headers forming a diagonally chamfered corner to the thick mass of the wall. Above, the bricks are imaginatively corbelled out to reconcile the diagonal chamfer at ground level with the orthogonal corner above. This is in contrast to the gentle curve and folding in of the wall on the south side of the opening. The north wall inspires similar awe in its sheer brickwork face, though this time, detail is provided in high relief – described as 'abstracted ivy' by Gordon Benson,[312] and designed to respond to a cluster of nearby trees. The design is apparently unrationalised. Bricks are turned 45 degrees in vertical lines, which sometimes extend to almost the height of the building. Sometimes a ladder detail is achieved by the placement of stretchers in alternate courses, between the angled bricks; and in other instances the angled brickwork exists in much shorter clusters in random configurations. All of this is very finely crafted and imaginative, but it is a development of similar experimentation into the tactility and aesthetic quality of brickwork, which began as far back as St. Patrick's,

[312] Benson, G. J. (2007) 'Sources, ideas and lessons.' *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987.* Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City, p. 43.

Greenock, in 1935, occurring again at St. Peter-in-Chains, Ardrossan, in 1938. This preoccupation of detail to brick craftsmanship would also extend to the construction of Robinson College, Cambridge, in 1980. The north front reveals further celebration of mundane or ubiquitous architectural elements. The downpipes are arranged as a deliberate and very obvious part of the composition of this façade – five square-section pipes, equally spaced and unrelated to any rhythm or pattern on the brickwork, march across the wall, emerging from large rectangular hoppers at the bottom of the parapet of the concealed roof behind. The great east wall displays a similar concern in its dynamic tactility – unsurprising given such an expanse of unrelieved masonry. This time, however, the detail is horizontal, as opposed to the vertical detailing of the other three facades. Benson states that the apparently arbitrary lines of recessed and protruding brickwork are suggestive of clouds,[313] originally with a cross set in a niche at the northern end of the wall, indented into the parapet wall, marking the position of the new town. Where they are recessed, individual bricks are turned through 45 degrees, creating long, horizontal, rippling gouges in the surface of the wall. Where they protrude – towards the north end of the east wall – it is as if they have pierced the wall surface through long, thin slits. The effect, then, of shadows cast on the wall surface due to their dislocation from it, is quite magnificent and casts an abstract quality to an already richly crafted façade. The shorter south wall represents further variation in wall treatment; equally devoid of fenestration, but without the surface manipulation of the north and east facades. Instead, five vertical emphases at clerestorey level again appear; however, they are at this point slots within the parapet, as opposed to mere indentations, as they are in the adjacent west wall. The thickness of the wall is made apparent by the staggered, recessed brickwork along the top and west side of each slot, making the actual void of the slot off-centre. Square-section downpipes again descend from oblong hoppers, which are fed from roof drainage by way of the five parapet slots.

At St. Patrick's, Kilsyth, the sense of arrival of St. Bride's does not exist. The entrance is indicated by a vertical break in the façade and a recessed plane of glazing to clerestorey level. To the east of the main entrance, a plain reddish brick wall appears as a projecting plane, framed by the glazing of the entrance slot, clerestorey, and further vertical shaft of glazing at the east end of the main façade, separating it from the south-east wall. The artistry demonstrated in the high-relief brickwork at St. Bride's is absent at St. Patrick's; the courses being laid in simple stretcher bond. However, the north-east wall is fractured and jettied out at gallery level by an arcaded concrete vault, which is also the floor structure of the gallery. At ground level on this north-eastern side of the building, a

[313] Ibid.

projecting brick bay, with simple lean-to roof and a very narrow band of glazing beneath, indicates the Mortuary Chapel within; and to the east of this, giving onto a meeting room inside, are four brick oriels, with angular corbelled brickwork supporting their projection from the main façade. Their angled, glazed roofs continue the firm's preoccupation with indirect, overhead lighting. To the west of the entrance shaft, a massive plain brick wall with rounded corners, envelopes the baptistery. Above these numerous façade components, a horizontal strip of clerestorey glazing extends the length of the façade, and thereafter forms a continuous ribbon of high-level glazing around the perimeter of the church. Surmounting the clerestorey, a great, billowing angled, lid-like roof structure composed of steel girders clad in copper, hovers above; [314] the reflections in the glazing seeming to create an illusion of a near absence of supporting structure. The north-west and south-east walls are notably blind, save for the clerestorey glazing and a slit-like vertical window, deeply recessed and allowing focused light onto the baptismal font, on the north-west wall. The other significant elevation is at the south-west, which also faces a courtyard area. There is, therefore, for the first time a degree of ambiguity in terms of the church's principal façade. This elevation is deconstructed further, almost appearing as though the glazing were the principal plane of the wall and the brickwork secondary. The brickwork elements appear as five vertical panels; the first four being identically dimensioned, the function of which shall be revealed presently. The fifth is a great deal wider. These are, in reality, more akin to angled brick tubes containing a niche for a shrine, two confessionals each, and a stair, in the first; second, third and fourth; and fifth, respectively. They have the appearance of thick masonry structure that has been hollowed out to house these elements. From the western end of this façade, a vertical glazed shaft bearing another entrance is recessed by almost the depth of these vertical brick tubes; thereafter, narrower glazed slots that rise from ground to clerestorey, set up an alternating rhythm between the first three equally-dimensioned brick elements. The glazed slots between the third and fourth, and the fourth and the wider brick element are slightly wider, and adjacent to this is a very narrow strip of vertical glazing which connects to a wall which returns at 90 degrees, enveloping the Lady Altar within.

More compact than the large brick orthogonal churches of St. Bride's and St. Patrick's, St. Joseph's, Faifley nevertheless had a significant presence on its site. Walls were of plain stretcher-bond brickwork; lacking the detailing of St. Bride's, but their uneven colouring lent a dynamic quality to their massiveness, and the section of the building was much

[314] Rodger, J. (2007) 'Selected works.' *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987.* Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City, p. 119.

more restless than the monolithic, orthogonal brick planes with uniformly horizontal parapets of St. Bride's.

The principal presbytery facade had remnants of the panellised relationship of fenestration to brick wall that was explored at St. Mary of the Angels and St. Martin's, but has an altogether sparer aesthetic, in reality almost exhausted of significant features. Windows are expressed in either vertical configurations of one, two or three modules in a brick-clad oblong with monopitch gables with parapets, and a profiled monopitch roof is held in between.

In the sacristy the niche gives some contextual focus to what would otherwise be an entirely blank rear wall. The canted sides of the niche are composed of narrow slivers of glazing held in timber frames. This vertical rhythm executed in timber, was continued along the rear wall of the niche in front of its solid wall, imparting visual contrast to the simple tabernacle within the space of the niche on front.

At Our Lady of Good Counsel the east wall is a plain, low buff brick band with a narrow strip of glazing between it and the copper-clad roof. The north, south and west walls are treated in a similar fashion to the east; plain buff brickwork and copper-clad roofing.

The focus of this arrangement is the sanctuary, which is substantially free from very obvious architectural devices that indicate that it is so – the great north wall, in its sharply angled relief, seems statement enough. Multi-tonal brickwork laid in stretcher bond with the occasional soldier course, provides a strangely mesmerising framework for the altar. That this is a diaphragm wall further enhances its richness in terms of material depth. Although it lacks apertures, the simple sanctuary is demarcated by a stepped, vertical indentation on either side of the altar. A niche for the tabernacle is described in a similar way and, towards the apex of the wall, three paired, vertical, decorative indentations in the brickwork re-use a similar feature to that seen at St. Bride's. The Lady Altar appropriates a similar craftsmanlike language; however, on the west side of the altar, the wall is described by an angle which steps away from the dominant plane of the gable wall, creating a point-like corner, in reflection of those of the entrances on the east wall. The main altar itself is further accentuated by virtue of its stepped elevation within the sanctuary, and by a simple cantilevered baldacchino above.

St. Mary of the Angels is constructed of cream and pinkish to buff-coloured brickwork, intriguingly laid in bands of three courses of stretchers interspersed with a full row of soldiers. It is highly regimented, with the brickwork employed to demarcate fenestration of

varying dimensions and shapes, by virtue of its inherent modularity. The brickwork is particularly interesting because it is not treated as a defining envelope, but rather more abstractly as the outermost screen of a build-up of wall which allows the physical properties of the bricks to determine the extent of panels of solid brickwork and areas of glazing.

The front façade is unrelieved of any newly distinguishing characteristics. The focus is placed on the timber entrance doors set mid-way along the width of the taller nave volume. Directly above, narrow horizontal glazing cuts into the brickwork skin, asymmetrically extending westwards along the elevation, and stopping to emphasise the thickness of the east wall. Clerestorey glazing tops this façade, as it does on the others. At the interface of the taller volume and the lower volume, an 'L'-shaped window opening defines the two parts of the building. Its horizontal element extends westwards, acting in dynamic opposition to the fenestration above the main entrance, which extends towards the east wall. There is no clerestorey glazing on this façade, but the blank clerestorey level sits lightly and slightly recessed at the top of the brickwork.

As stated previously, the brickwork is treated such that, despite the quantity, it is not necessarily the defining feature of the building as a whole. It is not a 'punched' envelope; rather, it appears as irregularly orthogonal panels, which stop to allow fenestration to emerge in between. Fenestration on the house (apart from the high-level glazing) generally appears as vertical panels of floor to ceiling glazing; divided horizontally by a broad transom to allow an openable top pane. This fenestration is not uniform though – the window to the curate's bedroom, on the north façade of the presbytery, has a narrow vertical fixed pane beside the wider panel with the opening pane. The mullion that separates them continues up to form a mullion in the high-level horizontal glazing just below roof level. The front entrance is indicated by a front door with top and bottom glazing separated by a broad rail. Above, a narrow horizontal light would suggest a very conventional entrance. However, once again, this continues asymmetrically to the east. Where it stops, the glazing continues vertically back to ground level in another narrow slot of glazing, all resulting in a square panel of isolated brickwork between it and the front door. Other variations on the original window module appear according to the use of the space behind. Living spaces, unsurprisingly, are identified with larger areas of glazing, bedrooms and more private spaces (for example, the callroom) with the original module or just over, and bathrooms with high-level glazing or none at all. Even the presbytery has a triangular light cannon above the entrance. The west façade of the church features orthogonal protrusions housing confessionals and a shrine.

Buff-coloured brickwork envelopes St. Margaret's, Clydebank both internally and externally, with some playfulness exhibited in the interspersing of soldier courses between the stretchers; although not as intensively or frequently as the method used at St. Mary of the Angels. Similarly, a ziggurat stepping of brickwork to describe an angle is also used here around the sanctuary, the resultant shadow causing dark vertical bands, which frame the sanctuary and lend gravitas to the focal point of the altar.

Externally, there is relatively little to describe the internal arrangement. A lack of fenestration – apart from on the entrance façade – characterises the aesthetic of this building. Instead, low, blind brick walls, sometimes partially buried within the landscaped topography of the site, coupled with the lead work of the parapets, suggest an economical use of materials and a dearth of unnecessary detailing in favour of an experience – both spiritual and architectural – that can only be had by entering the building.

Concrete

The dominant aesthetic of Holy Family is of a restrained and rational clarity; a large oblong box constructed of concrete portal frames, infilled with brick, with shallowly-pitched, green copper-clad roofs.

The east (gable) wall is completely blind – the focus here becoming purely utilitarian, with only a chimney stack for relief.

The south side repeats the device used to engender a sense of spirituality – that indentation of the bay closest to the sanctuary; thereafter, the bays follow the material pattern of the north side, in their brick infill and horizontal clerestorey glazing. This time, however, the bay closest to the west (entrance) end is identical to the others rather than being extensively glazed like its counterpart on the north façade. A large portion of the south side, however, was altered in the 1970s, when a long, low, oblong extension was added to provide a substantial side-chapel, and with the added benefit of improving heat loss from the main body of the church. The side-chapel and lobby element begins part way along the south side, on the structural bay adjoining the sanctuary bay, and extends westwards beyond the front wall of the church, effectively sliding past the main church and coming to rest in alignment with, and just before, the church hall.

Double timber and glass doors at the mid-point of the façade describe the entrance itself. Above the doors, and stretching the width of the elevation between the glazed link that

connects to the campanile, and connecting to a similar feature on the side-chapel extension, is a horizontal band of glazing; again, seemingly arbitrarily vertically subdivided, and periodically fitted with small panels of coloured glass.

Internally the language of the narthex screen here is similar to other areas of glazing; deep timber horizontal elements and narrower vertical mullions. Here though, there is no irregularity of subdivision within the screen as a whole, as exists on the concealed glazing on either side of the sanctuary.

On the north side, access to the confessionals accords with the projecting external element, and appears as a narrowly laid vertically set timber screen, with doors to the confessionals given the same treatment, so that they appear to be seamless in context with the screen, save for their glazed panels and spherical metal doorknobs.

On the opposite side of the nave, a glazed screen separates the nave from the side-chapel. It has the same design as the glazed screen that separates the nave from the narthex.

The front façade of St. Andrew's is simply an infill to the structural frame expressed around its edges. Fenestration here takes the form of clerestorey glazing on either side of a central spandrel, with tall, narrow, more domestic-type windows with opening lights below. Elsewhere, very little fenestration exists on the painted, rendered walls, which, apart from the front facade, conceal the structure within.

The nave and sanctuary of the church of St. Charles Borromeo, Kelvinside are coupled within the largest element, a large oblong block, rounded at the west (sanctuary) end, as an apse. This principal element of the ecclesiastical complex is delicately framed in concrete. To the north of the main entrance, the baptistery is an introspective space in which the curved brickwork has a softening effect as it envelopes the small room. Throughout the church, materials and forms are articulated with intense clarity. This is so in the concrete skeleton and roof, and brick infill, with glazing that both defines their material and structural compatibility, and also their individuality and separateness, down to the altar and solid altar rail expressed in different types of marble – even the feet of the altar rail, which are triangular chunks of contrasting stonework.

Currently at St. Martin's, Castlemilk, grey harling masks the original external brick finish with concrete detailing,[315] a feature that envelopes the entire perimeter of the building. Approaching the church from Ardencraig Road, the terraced ascent of the site toward the ensemble of built elements is striking, and it is here that the effect of the harling covering is most notable in its negation of visual impact that was formerly offered by the more modularised use of concrete and brickwork.

Originally, this was constructed such that the concrete floor slabs were expressed externally, with the walls of each storey being constructed in plain, stretcher-bond brickwork. In this regard, it differs from the playfulness of the brick detailing of St. Mary of the Angels, yet it echoes the language of the fenestration there. Again, the brickwork suggests the outlines of the various modules that the glazing assumes. Once again, this is treated as floor to ceiling units of varying widths, and apparently arbitrary use of high-level horizontal glazed units that link to another vertical unit. It is orientated north-south, with the north facade of the presbytery facing the road. The dominant façade is that which draws the visitor toward the hinge-point of house and main church building, and hence the main entrance to the church. The presbytery is given prominence on this side with a sharply monopitched roof clad in green patinated copper panels, and is expressed as a volume that jetties out beyond the narrow north elevation from first floor level. To the east of the north elevation, a large window, unusually with an arched head cast into the concrete slab, recalls similar construction methods to those used by Le Corbusier at Maisons Jaoul.

The east façade of the presbytery demonstrates a similar language of glazing to the main (west) façade. The application of harling both here and on the main church building imbue them with the feeling of a harled Scottish towerhouse, with its fenestration of varied dimensions and at varying levels.

Each lateral wing is roofed with a green-patinated copper monopitch, with a diagonally aligned ridge, such that the monopitch becomes deeper as it progresses towards the southern end of the building.

[315] Rodger, J. (2007) 'Towards the MacMillan and Metzstein years.' *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987.* Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City., p.239.

Fig. 96 Photograph showing the concrete frame with brick and glass infill at Holy Family, Port Glasgow

Fig. 97 Photograph showing the concrete frame with brick and glass infill at St. Charles Borromeo, Kelvinside

Render

The Roman Catholic Pavilion was faced in smooth white stucco, recalling the functionalist experiments of the preceding decades; with a stone rubble base; with murals painted by Hugh Adam Crawford, depicting events and work of the Catholic Church. While the building could be seen to acknowledge the international functionalist experiments of the 1920s and '30s, there are distinct ecclesiastical references also. In Corpus Christi, Aachen, the white external render and the deconstruction of the simplified masses of church and campanile bear some degree of analogy.

It was at the Roman Catholic Pavilion that Coia first used some of the architectural details such as the raised roof above the altar, which would be used later as a device to admit a controlled amount of light in an acknowledgement of spirituality and the most sacred, and therefore most important area of the church.[316] There were no windows in the pavilion, with the sanctuary lit indirectly from above. The self-consciously modernist, smooth, white, geometrical forms of the pavilion also resurfaced at St. Paul's, Glenrothes and St. Mary's, Bo'ness in addition to the articulated apse form with light directed onto the altar. The mural paintings and internal lighting focus suggested that the pavilion was both introspective and outward-reaching.

The design of the Catholic Pavilion suggest that Coia had full rein to express his architectural ideas. The group of red-brick churches that he had designed in the eight years leading up to 1938 were notable and original in many ways, and were perhaps sometimes influenced by the involvement of the client, the Roman Catholic Church, and in particular the Archbishops of the diocese in which they were situated. Indeed, in the positioning of the articulated geometric volumes, the monolithic quality of the building material (in these cases, brickwork), and in their picturesqueness and craftsmanship, are qualities which would begin to coalesce in the Catholic Pavilion and which would later be developed and purified in the practice's post-1956 work.

After the Roman Catholic Pavilion, the use of white rendered walls was somewhat sporadic. As one of Gillespie, Kidd & Coia's smallest churches, Sts. Peter & Paul, Arrochar, is somewhat anomalous within their body of work, but nevertheless employs a similar general design language to their previous developments, particularly in terms of its simplicity of massing and fenestration. However, in contrast to the brick-built churches of

[316] Watters, D. (1997) *Cardross Seminary Gillespie, Kidd & Coia and the architecture of postwar Catholicism.* Edinburgh: RCAHMS. p. 23.

the 1930s and '40s, this church, in a similar manner to Ian Lindsay's St. Finan, Invergarry (1939), is expressed in simple white render, also featuring a small, sculptural attached bell-tower. This is punctured through its lower half to form the doorway into the building, and at the top to provide a void to suspend the bell within. Its rubble stonework coupled with the rendered exterior recalls the Roman Catholic Pavilion, but such acknowledgement of an international modernity is tempered here by a vernacular aesthetic.

Whereas previous churches of the long basilican type had been executed in brickwork, intriguingly, St. Kessog's returns to a white rendered finish – only the third such use since St. Peter and Paul and the Roman Catholic Pavilion. Its use here is remarkably conspicuous due to the almost blind front elevation, where an absence of overhang or fascia to the gable almost allows the render to meet the roof plane. The resultant simplified abstraction is only relieved by the sculptural porch, entrance doors and bell mounted on a carved stone plaque above. Fenestration on the front elevation is nothing more than a tiny square pane on either side of the entrance, and narrow bands of fenestration along the length of the building. The church came into existence roughly contemporaneously with St. Paul's, and despite the obvious difference in layout, there is a correlation in their sared sense of geometric and aesthetic.

Formally, St. Mary's, Borrowstouness was more abstract than either St. Paul's or St. Martin's. It was designed with a white cement-render finish over load-bearing brickwork, which increased its abstract qualities and seems to encourage greater perception of the whole rather than a focus on detail of the parts.[317]

Once again, light is admitted indirectly towards the baptismal font from a vertical panel of glazing that faces the church. Above the monopitch, steeply-angled parapets continue the baptistery enclosure upwards. Above the ridge of the monopitch facing the church, no solid wall existed, just three horizontal bars which spanned the void, supporting a cross.

The entrance front to the main church – the narrow end of the wedge – retained something of the fenestration type of St. Martin's and St. Mary of the Angels, but there was much less of it. A narrow vertical slot appeared as a gash in the masonry, which obliterated the parapet of the wall, lighting the gallery inside. Further down, a horizontal slot window with a short vertical stub off-centre to the main horizontal opening, seemed to point towards the glazed entrance. However, it is at the sharply-angled side walls that the

[317] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson, p.75.

most development of this model seems to have taken place. Whereas previously at St. Martin's there had been a variety of windows, which had been angled in order to train light onto the altar, at St. Mary's, this evolved into a series of eleven, completely detached, white-rendered piers, orthogonal to both the entrance façade and to the sanctuary façade, rather than to the implied angle of the side walls. Between each pier, a narrow floor to ceiling sliver of glazing allows unidirectional light to fall on the wide end of the church, and hence onto the sanctuary and altar. This use of stepped orthogonal piers with glazing between was used by Barry Byrne at Christ the King, Turner's Cross, Cork in 1927, so was not wholly new, but neither had it been widely seen in ecclesiastical design previously.

At Sacred Heart, Cumbernauld, rather than celebrating the tactile and visual diversity of brickwork as both a functional and inherently visual material, programme and structure are enveloped in pale-coloured render, smooth on the outside and roughcast internally. This could be seen to be, in part, a response to the aesthetic context of Cumbernauld, but also it was a further development of the firm's repertoire, where they alternated between facing brick and render, in the last decade of their ecclesiastical work.

The north-east wall is blind save for a cross mounted towards the parapet. On the north-west wall, a dynamic series of recessed windows of coloured glass– vertical apertures of varying height – break through the wall and reveal its thickness. Again, the remainder of this façade is unrelieved plain render. The south-east façade talks a similar language, except here, the glazing elements are not so extensive, in deference to the sanctuary in the church's south corner.

The ancillary block and presbytery are undifferentiated from the church in external finish and aesthetic, much like the majority of the firm's ecclesiastical work. Still evident and continuing a pattern from the preceding early 1960s cluster, the fenestration of the presbytery is the dominant feature of an otherwise sparsely detailed exterior. This time, however, the irregularly placed windows interact with panels of painted render rather than brickwork.

Internally the timber screen defining the narthex continues internally along the north-east wall; breaking to allow a narrow staircase to wind up to a choir gallery; and angling out in an inverted mirroring of the external bay (though it is offset to the south). This band of timber forms a base for the great organ pipes, which are similarly arranged in an angled, three-sided arrangement.

St. Columba's, East Kilbride, is harled on the exterior and plastered on the interior. A sculptural quality is achieved in the uniform envelope of the external render, coupled with corner light chimney and angled roofline.

Fig. 98 Photograph showing the rendered envelope of St. Columba's, East Kilbride. Alex Gabrysch & Zena Moore

Conclusion

All of the firm's churches employed materials that were versatile, practical, or utilitarian, which was both appropriate financially during the economic austerity of the interwar and

post-war years, but also could be seen to have been more relevant during a time of social and architectural transition. The Archdiocese of Glasgow had been keen to assert Catholic culture during the interwar years and beyond, and use of common materials may have reinforced its relevance in a modernising society.

After the Second World War, materials such as concrete and brick combined modernist concerns of material expression and honesty with a focus on liturgical sequence and emphasis. These were often used sculpturally to control light. Render was used in various commissions over the lifespan of the practice, and had dual reference points in the Scottish tradition of white harling, and in the sculptural massing of Brutalist precedents such as Ronchamps.

Part 3: Parallels

3.1 Introduction

The purpose of this section is to focus on the longevity and design of Gillespie, Kidd & Coia's ecclesiastical commissions by comparing them with a similar experimental church-building drive that occurred in Rome during the interwar and postwar years. It is the firm's collective endeavour rather than any one individual building that is of interest, and, this section will argue, its international significance more than any British parallel, allow it to be regarded as a successful international design practice.

The architectural context of how Italy wished to be portrayed in the twentieth century is well illustrated in Kirk.[318] It began with the International Exhibition of Decorative Arts in Turin, of 1902, which ushered in a new era of discovery and creativity in Italian architecture – a new avant-garde with what would become unremitting modernist intentions. Raimondo d'Aronco's designs for the exhibition, though much criticized, and of no direct consequence on the direction that Italian modernism was about to take, did prove that it was possible to react to the immense weight of Italian architectural culture.[319]

What was realised was that an approach that reconciled inventive international modern with an expression of quintessential national tradition was desired, and furthermore was possible.[320]

In 1925, Italy once again had the opportunity to represent herself internationally, this time at the Exposition Internationale des Arts Decoratifs et Industriels Modernes, in Paris. This time, the architect Armando Brasini was chosen to design Italy's pavilion – in a political move to challenge the perceived simplicity of European modernism. He was chosen for his ability to re-interpret Italian architectural traditions in a liberal and modern way; indeed, he felt that the classical tradition in Italy was, at that point, still evolving.[321]

Two years previously, in Rome, Brasini had begun his fantastically and unconventionally composed modern Roman Baroque basilica – the Church of the *Immacolato Cuore di Maria*.[322] in the Parioli district of Rome. This minor basilica was designed by Armando

[318] Kirk, T. (2005) *The architecture of modern Italy: volume 2: visions of utopia 1900-present*. New York: Princeton Architectural Press,
[319] Kirk, T. (2005) *The architecture of modern Italy: volume 2: visions of utopia 1900-present*. New York: Princeton Architectural Press, pp. 15-18.
[320] Ibid., p. 18.
[321] Ibid., p. 63.
[322] Translates as *Immaculate Heart of Mary*

Brasini in 1923, and completed by Marcello Piacentini before 1936. It is an odd montage of semi-deconstructed, simplified classical motifs that can be loosely categorised within a Classical canonl, although it has to be seen through the eclectic and experimental eyes of Brasini. Alderman asserts that its 'vigo[u]r, bold massing and sense of experimentation' leads to an exciting, modern form of Roman Baroque.[323]

Politically, the twentieth century saw the introduction of Mussolini's Fascist regime as creator of Rome's urban future. This was reflected in the Fascists' grandiose aspirations – those that sought to imbue their interventions with something of the pomp and gravitas of the city's original imperial architecture. Modern traffic routes and buildings therefore sit, cheek by jowl, with pieces of Roman antiquity. That this striking dialogue of ancient and modern was subsequently portrayed in films such as Fellini's La Dolce Vita, only serves to reinforce a sense of the Regime's imperial aspirations.

The Fascists effectively added a new layer to the Eternal City – one which sat on top of, wove in between, and altogether extended, the existing urban fabric beyond the city's Aurelian Walls. In parallel was an expansion of the city's churches in a building drive that both revised existing parishes and built churches for new ones in the vast new peripheral housing estates.

Pius XI: Builder Pope

Notwithstanding views on the success of the new Roman churches, the manifestation of Pius's papal authority through them ran concurrently with debates on the liturgy, which, as has been discussed, effectively had its origins at the beginning of the twentieth century. Both Pius XI (1922-39) and Benedict XV (1914-22) before him worked to neutralise anti-Modernist theological debate[324] with the Roman Catholic Church. Giacomo Della Chiesa (1854-1922), who became Benedict XV, while in post as Archbishop of Bologna, was tasked with eradicating all modernists within his diocese; however, he instead

[323] Alderman, M. (2009) *The modern Baroque of Armando Brasini*. 5th February. New Liturgical Movement. [Online] [Accessed on 23rd June 2017] http://www.newliturgicalmovement.org/2009/02/modern-baroque-of-armando-brasini.html#.WU0L_VXyupo

[324] Poulat (cited in Jedin, H. and Dolan, J.) defines modernism in Roman Catholicism as 'the meeting and confrontation of a long religious past with a present which found the vital sources of its inspiration in anything but its past'. See Aubert, R. (1981) 'The modernist crisis.' *In* (Jedin, H. and Dolan, J. *History of the church IX: the church in the industrial age*. London: Burns & Oates, p. 420.

demonstrated sympathy with them, as long as they "were tested against 'the sense of the church'[325]. Pius XI, as successor to Benedict XV, also worked to alleviate pressure surrounding the Modernist debate, acting to reinstate key figures who had previously been stripped of power because of their beliefs[326]. Zsolt Aradi, author of a biography of Pius XI, describes him as a modernising Pope, both in terms of the 'entire papacy as an institution' and in terms of technical progress.[327] Pius XI was also a scholar of some distinction, and, so it would seem reasonable to consider him as at least being conversant with progressive ideas – in theology or otherwise.

Aradi links an emerging modern papacy to the Lateran Treaty itself, and subsequent formation of the Vatican as a modern city state, with all the trappings of such an entity; 'boundaries, a telephone, postal and telegraph system, a railway station, a courthouse; even a jail'.[328] Furthermore, the Pope himself seemed to have a personal interest in matters of architectural design and construction, personally involving himself in in the Vatican City's construction.[329] It appears that Pius XI had an interest that extended beyond simply administrative organisation, instead, involving himself in the smallest details, whether they concerned the erection of the broadcasting station or the appearance of the walls at the palace of the governor of the new city.[330]

The Pontiff developed an excellent working relationship with Leone Castelli, an architect - engineer from his home region of Lombardy in northern Italy. Aradi cites that anecdotally the contractor spoke at length about the 'building interests' demonstrated by the Pope, who 'almost became a bricklayer himself'.[331] Accordingly, following Castelli's death in 1956, a large amount of sketch and drawing material, with annotation and corrspondence detailing Pius XI's 'suggestions' to Castelli, was left. According to Aradi, the material

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[325] Kelly, J. and Walsh, M. (2005) *Oxford Dictionary of Popes*. 2nd ed. Oxford: Oxford University Press, p. 319.

[326] Kelly, J. and Walsh, M. (2005) *Oxford Dictionary of Popes*. 2nd ed. Oxford: Oxford University Press, p. 323.

[327] Aradi, Z. (1958) *Pius XI the Pope and the man*. New York: Zsolt Aradi p. 165.

[328] Aradi, Z. (1958) *Pius XI the Pope and the man*. New York: Zsolt Aradi, p. 163.

[329] Ibid.

[330] Aradi, Z. (1958) *Pius XI the Pope and the man*. New York: Zsolt Aradi, pp.163-4.

[331] Aradi, Z. (1958) *Pius XI the Pope and the man*. New York: Zsolt Aradi, p. 164.

evidences that much of the construction work in the Vatican City - be it new buildings, renovations or archaeological activity - was instituted by the Pope himself.[332]

Maintaining a personal interest in the advancement of science, he was determined for the Vatican to be furnished with the most up to date facilities. In 1931, he commissioned a radio station to be placed there, thereby exerting global influence and being the first pope to use such a medium for 'pastoral purposes'.[333] Further to this, he organised the modernisation of the Vatican Observatory, moving it from the Vatican to Castel Gandolfo in the process. This influence would also filter through to the unfolding sequence of modern churches both in Rome and elsewhere.

Aradi highlights an extensive list of building projects, which the Pope instigated and financed personally. In terms of restoration work, this includes the partial restoration of the baptistery at the Lateran Basilica, the rebuilding of the patriarchal palace at the Lateran, restoration of the Church of Santa Maria Maggiore to its most ancient form with repairs of its mosaics undertaken and modern lighting fitted. Further restoration work was bestowed upon the Cancelleria and the Palace of Convertendi of the Sacred Congregation of Oriental Rites and for the Apostolic Penitentiary, the Palace of the Holy Office, St. Paul's Basilica, and an intensive programme of restoration at St. Peter's Basilica including Michelangelo's dome and the installation of electrically powered bells.

New building work included the Oriental Institute, the Institute of Christian Archaeology, the Russian College, the Abbey of San Gerolamo, the Ateneo Lateranense, the headqarters of Catholic Action and a number of educational establishments for the training of international clergy. These included the Ruthenian College and buildings at San Callisto in Trastevere, essentially modern office complexes built to house the Roman cengregations. In addition, the Pope supervised the enlargement of the Casina di Pio IV as a home for the Pontifical Academy of Sciences, and planned an 'industrial and technical center' for the Vatican. This included garages, workshops, a central heating thermoelectric installation, a power station and an array of shops and other commercial buildings including cold storage warehouses, electric bakeries, a modern pharmacy, medical dispensary, post office and telephone and telegraph facilities, and the renovation of the Torrione di Nicolo V for the Vatican Bank. Perhaps more well-known are the

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[332] Aradi, Z. (1958) *Pius XI the Pope and the man*. New York: Zsolt Aradi, p. 164.

[333] Kelly, J. and Walsh, M. (2005) *Oxford Dictionary of Popes*. 2nd ed. Oxford: Oxford University Press, p. 323.

modernisation of the Vatican Library, including the modernisation and enlargement of its reading room, and the building of the Pinacoteca. In engineering terms, Pius XI organised the construction of a large underground hydraulic installation for the irrigation of the Vatican Gardens. Finally, he commissioned about thirty seminaries and twenty new churches.

At least eight of the parish churches mentioned above were designed and or constructed during Pius XI's pontificate and typologically fall into a series of thematic models. Some of these respond to a contemporary resurgence of interest in Roman church types, through the restoration of significant buildings in the late nineteenth and early twentieth centuries, while others seem to react to developments in modernist forms in international architecture. Architettura journal sheds some light on this and provides a basis for Muratore's comments on the provenance of Modernist ideas within a Roman context, with recent German ecclesiastical precedents frequently cited.[334]

A Brief History of the Opera Romana

The commissions for the Roman Catholic Church undertaken by Gillespie, Kidd & Coia, from St. Anne's onwards, can be set against a parallel design background of twentieth century Rome. With the city as the centre of the Catholic religion, the influence of Pope Pius XI, whose significance underpins the present discussion, could be argued to have been felt strongest there, expanding under the premiership of Benito Mussolini, in the creation of a series of new churches emblematic of the 'new' Italy.

In August 1930, the same year that Coia and Archbishop Mackintosh met to agree the first of the Archdiocese of Glasgow's numerous commissions, Pius XI, as Bishop of Rome,[335] issued a *Motu Proprio* which had implications for the future of Roman Catholic church design in the city. His *Pontificia Opera per la Preservazione della Fede e la Provvista di Nuove Chiese in Roma*[336] had as its remit the task of providing,

[334] Muratore, G. (2006) 'Architetti romani del Novecento nella metamorfosi dello spazio sacro.' *In* Mavilio, S. (ed.) *Guida all'architettura sacra Roma 1945-2005.* Milan: Mondadori Electa S.p.A., p.15.

[335] The Pope is both head of the Roman Catholic Church and Bishop of Rome

[336] Translates as 'Pontifical Work for the Preservation of the Faith and the Provision of New Churches in Rome'

with the greatest possible care, the erection, institution and supplying of new parishes, as well as the reconfiguring of old ones, the purchasing of new land, the construction of churches and associated buildings, as well as the practices required by the civil authorities[337].

What followed was a long series of new churches in Rome and its environs, carried out by a number of different architects, a selection of which will be analysed in this study in comparison with those of Gillespie, Kidd & Coia. Some of these could be termed 'fascist', but were also representative of the contention between Pius XI and Mussolini (who eventually reached agreement of political issues over the long-debated 'Roman Question', with the signing of the Lateran Pact in 1929). In this regard, Mussolini, a declared atheist, was required to acknowledge a State relationship with the Church. Previously, this recognition between the Pope and the King had not existed, as illustrated when Leopoldo Torlonia (1853-1918), Mayor of Rome from 1882-87 had been forced out of office by Prime Minister Francesco Crispi (1818-1901), for demonstrating a surfeit of enthusiasm in congratulating the then Pope, Leo XIII on his jubilee[338]. Pius XI adopted the motto, 'Christ's peace in Christ's kingdom', which has strong overtones of proactivity rather than passivity in society. From this, he established the feast of Christ the King in the Holy Year of 1925,[339] in an attempt to gain leverage over the political dominance of Mussolini's fascism. This was a powerful message of the supremacy of Christ himself over earthly leaders, be they kings or dictators, and it also had some impact on unfolding liturgical changes, highlighting the fundamental importance of the altar in the liturgy.[340]
In Stefano Mavilio's publication on the sacred architecture of Rome, contrasting views on the new churches are discussed. Ignazio Breccia Fratadocchi, reviews the bureaucratic as well as architecural success of the Opera Romana. Whilst he is more flattering of the

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[337] Breccia Fratadocchi, I. (2006) 'La diocese di Roma nella seconda meta del XX secolo' In Mavilio, S. (ed.)Guida all'architettura sacra Roma 1945-2005. Milan: Mondadori Electa S.p.A., p.23.

[338] Rao, J. (no date) Secular Italy and catholicism 1848-1915: liberalism, nationalism, socialism and the romantic idealist temptation (a chapter in Models and Images of Catholicism in Italian and Italian American Life Forum Italicum of the Center for Italian Studies at S.U.N.Y. Stony Brook, 2004, pp. 195-230). Writings by Dr. John C. Rao. [Online] [Accessed on the 2nd May 2015]
http://jcrao.freeshell.org/Italy-1900.html

[339] Kelly, J. and Walsh, M. (2005) *Oxford Dictionary of Popes.* 2nd ed. Oxford: Oxford University Press, p. 321.

[340] Watters (2016) *St. Peter's, Cardross birth, death and renewal.* Edinburgh: Historic Environment Scotland in association with NVA, p.37.

Post-Second Vatican Council efforts, he is critical of those churches built from the initiation of the programme in 1930 until the 1960s and '70s, portraying it as an excessively bureaucratic venture and arguing that programme guidelines tended to centre on economic and functional issues rather than on architectural quality. He critiicizes church architects of the time for being overly monumental and displaying a historicist, formally driven aesthetic. Furthermore, that in his capacity of technical advisor of the new church schemes, Carlo Ceschi noted, in his 1963 publication, *Le Chiese di Roma dagli Inizi del Neoclassico al 1961*, misunderstandings between client and architect, and churches which (perhaps unsurprisingly at the time of writing), were 'constitutionally irrelevant'.[341]

The historian, Giorgio Muratore, however, who frequently argues that the architects involved created spaces of real architectural quality, does not share Breccia Fratadocchi's views. Reviewing the churches of the *Opera Romana* typologically and phenomenologically, Muratore notes the rich repertoire of work and personalities in twentieth century Roman ecclesiastical architecture, and describes a 'radical overhaul'[342] of the city's historical heritage under Pius XI. He argues the importance of the church as a building type, both in terms of a sense of identity and rootedness within the Roman context, and the potential to experience a contemporary architectural vocabulary, sheds light on the spatiality and design of the new Roman ecclesiastical architecture of this papal initiative.

Muratore associates twentieth century Roman churches with a new modernity connected to a rediscovery of Chritian antiquity through achaeology and restoration work, Byzantine forms, and Romanesque as in the case of Tullio Passarelli's Santa Teresa al Corso d'Italia (1902), and a modern form of Baroque such as Armando Brasini's monumental Sacro Cuore di Maria. Of Marcello Piacentini (1881-1960) a significant figure in the sphere of twentieth century Roman architecture, and 'de facto' architect of Mussolini's regime,[343] he paints a generous picture of the architect and his approach to modernism, describing

[341] Architect and client merely talking the same words instead of the same language. Breccia Fratadocchi, I. (2006) 'La diocese di Roma nella seconda meta del XX secolo' In Mavilio, S. (ed.)Guida all'architettura sacra Roma 1945-2005. Milan: Mondadori Electa S.p.A.,, p. 24.

[342] Muratore, G. (2006) 'Architetti romani del Novecento nella metamorfosi dello spazio sacro.' *In* Mavilio, S. (ed.) *Guida all'architettura sacra Roma 1945-2005.* Milan: Mondadori Electa S.p.A., p. 12.

[343] Kirk, T. (2005) *The architecture of modern Italy: volume 2: visions of utopia 1900-present*. New York: Princeton Architectural Press, p. 85.

his ability to interpret Rome's past and to create a kind of 'tempered' modernism.[344] Muratore also sees a degree of synergy with the work of Giovanni Muzio (1893-1982), and with the expressionism of such contemporary German architects as Paul Bonatz (1877-1956), Emil Fahrenkamp (1885-1966), Dominikus Böhm (1880-1955), and Rudolf Schwarz (1897-1961). Piacentini was also familiar with modern Swedish secular architecture such as Ragnar Ostberg's Stockholm Town Hall, and the work of Thomas Tait, such as his modern villa at Silverend, Essex.[345] Piacentini's approach mediated a monumental classicism with developing modernity, and Muratore suggests that through his use of external brick walls, a similarity with the medieval tradition of the great Italian cathedrals exists, and that his work, through an interpretative approach, warns against the 'false history' seen in the eclecticism of previous generations. [346]

The following are chronological lists of Roman architectural work studied The first lists churches built in the lead-up to Pius XI's *Opera Romana*, while the second lists a selection of churches studied that were built during the building initiative. In the subsequent discussion, however, churches will be discussed not in chronological order but according to their particular characteristics.

Pre-1930

Chiesa dall'Addolorata, Rome, Giuseppe Astorrri, 1900
Sta. Teresa al Corso d'Italia, Tullio Passarelli, 1902
S. Giuseppe alla Nomentana, Carlo Busiri Vici, 1904
S. Patrizio, Arisitide Leonori, 1911
S. Lorenzo da Brindisi, Giovanni Battista Milani, 1912
Santa Croce al Flaminio, Aristide Leonori, 1923
Immacolato Cuore di Maria, Armando Brasini, 1923

Opera Romana

S. Roberto Bellarmino, Clemente Busiri Vici, 1932-3
Sant'Ippolito Martire Clemente Busiri Vici, 1932-3

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[344] Muratore, G. (2006) 'Architetti romani del Novecento nella metamorfosi dello spazio sacro.' *In* Mavilio, S. (ed.) *Guida all'architettura sacra Roma 1945-2005.* Milan: Mondadori Electa S.p.A., p. 15.

[345] Piacentini. M. (1930, reprinted 1994) *Architettura D'Oggi*. Libria-Melfi: Italy. P. 160 and 155.
[346] Muratore, G. (2006) 'Architetti romani del Novecento nella metamorfosi dello spazio sacro.' *In* Mavilio, S. (ed.) *Guida all'architettura sacra Roma 1945-2005.* Milan: Mondadori Electa S.p.A., p. 15.

Cristo Re, Marcello Piacentini, 1933
Gran Madre di Dio, Cesare Bazzani, 1933
S. Francesco Saverio, Alberto Calza Bini, 1933
S. Felice da Cantalice, Mario Paniconi & Giulio Pediconi, 1934
Santissima Annunziata (Sabaudia), 1935
S. Saturnino, Clemente Busiri Vici, 1935
Ss. Fabiano & Venanzio, Clemente Busiri Vici, 1936
Ss. Pietro & Paolo, Arnaldo Foschini, 1937-41
Nativita di Nostro Signore, Tullio Rossi, 1940
Sta. Galla, Tullio Rossi, 1940
Sta. Maria Regina degli Apostoli alla Montagnola, Studio Forneris Favini 1947-54
San Leone Magno, Giuseppe Zander, 1951-2
S. Filippo Neri in Eurosia, Pier Luigi Maruffi, 1952
Nistra Signore Ss. Sacramento e Santi Martiri Canadesi, Bruno Maria Appolonj Ghetti, 1952-5
Sacro Cuore di Gesu Agonizzante, Ildo Avetta, 1953-5
Sant'Antonio di Padova, Costantino Forleo, 1955-6
San Giovanni Bosco, Gaetano Rapisardi, 1953-8

Churches

Early 20th Century

Some of Gillespie, Kidd & Coia's early churches share general features with the Roman architecture of the two decades preceding the start of the *Opera Romana*, the first thirty years of the twentieth century. Chronologically, this correlates with Coia's first visit to Italy in 1923 and with the period that Donald Mackintosh spent in Rome as Rector of the Scots Pontifical College. In St. Anne's, St. Columba's and St. Columbkille's, Classical and Romanesque influence similar to early twentieth century Roman examples can be discerned, though this is to some extent mediated by Gillespie, Kidd & Coia's more eclectic design approach. At the end of the nineteenth century, ecclesiastical architecture in Rome explored a loose type of Romanesque, or Early Christian language, in line with

ecclesiastical styles familiar to the Christian tradition.[347] At the beginning of the twentieth century, a series of red brick-built churches, plain but with simplified Lombardic Romanesque detailing, were built in the suburbs of Rome. These included Tullio Passarelli's (1869-1941) church of Santa Teresa on the Corso d'Italia (fig. 99), and later his church of San Camillo de Lellis (1906). Also contributing to this model were Carlo Busiri Vici (1856-1925) with his church of San Giuseppe in the Nomentana district of Rome (1905) (fig. 100), Aristide Leonori's San Patrizio (1911) (fig. 101), and Giovanni Battista Milani's (1876-1940) San Lorenzo da Brindisi (1912).

In addition, in general volumetric composition, spatial planning and architectural detail, Rome's large number of Early Christian basilicas provide immediate precedent for some of its twentieth century churches. These early buildings were subject to much alteration over time, including later restoration work. One of the most interesting basilican examples is the Church of Santa Maria in Aracoeli on the Capitoline Hill, which was subject to a comprehensive programme of renovation in the 1560s. Following the Council of Trent, in a similar spatial unity as that achieved at Giacomo da Vignola's contemporary church of Il Gesu, the interior was re-ordered to consolidate the space with a liturgical focus on the altar which had not previously existed. This was due to the position of the medieval choir between the nave and the altar, and a profusion of other chapels, altars and funerary monuments. In her paper, 'The high altar of santa Maria in Aracoeli: recontextualizing a medieval icon in Post-Tridentine Rome', Kirstin Noreen argues that this was,

one of the first examples of the widespread campaign that sought to revitalize and restore Rome's venerable basilicas during the period associated with the Counter-Reformation.[348]

The stark, flat-topped 13th /14th century brick facade of the church, overshooting the basilican sturcture behind, is also striking. It was originally intended to be overclad, but this was never carried out. Beneath the flat parapet the facade curves outwards in a device employed to counter foreshortening in viewing a mosaic applied to the elevation (below). This device also exists at Sta. Maria in Trastevere (begun in the 4th century).

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[347] Bandmann, G. (1981) 'New art forms.' *In* Jedin, H. and Dolan, J. *History of the church IX: the church in the industrial age*. London: Burns & Oates, p. 302.

[348] Noreen, K. (2008) 'The high altar of santa Maria in Aracoeli: recontextualizing a medieval icon in Post-Tridentine Rome.' *Memoirs of the American Academy in Rome*, vol. 53, 2008, p. 99. *JSTOR*, www.jstor.org/stable/25609506.

The restoration of Santa Maria in Cosmedin from 1894-99 suggests impetus for the conception of Giuseppe Astorri's Santa Maria Addolorata (begun in 1910) (Fig. 103); the national Argentine church in Rome, and later, the church of Santa Croce al Flaminio (1913) (Fig. 104) by Aristide Leonori (1856-1928).

Much later, a modern variation of this model type occurs in the church and separate campanile arrangement some of the churches built under the *Opera Romana.* Including Costantino Forleo's Sant'Antonio di Padova (1955-56) (Fig. 105).

From 1930, the experimentalism of Pius XI's *Opera Romana,* provided the impetus for a combined approach which borrowed both from Roman tradition and acknowledged the emerging 'continental idioms' referred to by Coia in notes for his Gold Medal Speech (cited in McKean[349]). The following discussion aims to draw out parallels between the Roman churches and those of Gillespie, Kidd & Coia.

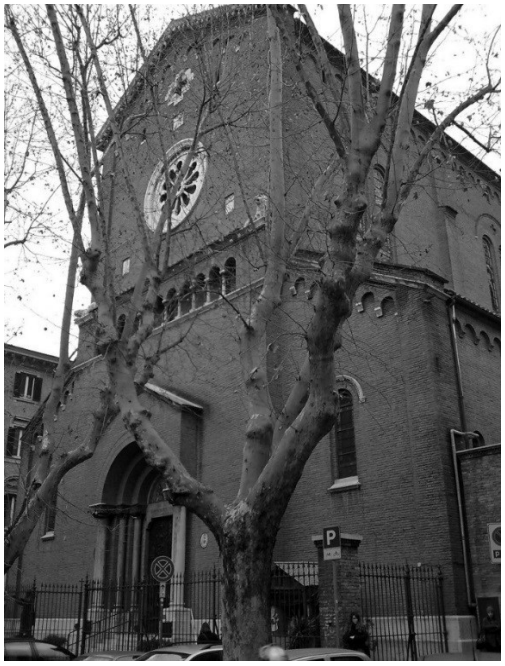

Fig. 99 (left) Sta. Teresa al Corso d'Italia, Rome (1902), Tullio Passarelli

Fig. 100 (right) San Giuseppe sulla Nomentana, Rome (1904), Carlo Busiri Vici

[349] McKean, C. (1987) *The Scottish Thirties - An Architectural Introduction.* Edinburgh: Scottish Academic, p. 135.

Fig. 101 (left) San Patrizio, Rome (1911), Aristide Leonori

Fig. 102 (right) San Lorenzo da Brindisi, Rome (1912), Giovanni Battista Milani

Fig. 103 (left) Santa Maria Addolorata, Rome (1900), Giuseppe Astorri

Fig. 104 (right) Santa Croce al Flaminio, Rome (1923), Aristide Leonori

Fig. 105 Sant'Antonio di Padova, Rome (1955-6), Costantino Forleo

An Evolving Classicism

The 1920s saw the emergence of what became during the course of the subsequent three decades, interpretations of an evolving Classical language. This ranged from Armando Brasini's (1879-1965) fantastically composed and exuberant modern Roman Baroque basilica – *the Church of the Immacolato Cuore di Maria* (1923) (Fig. 106), to the academic *Gran Madre di Dio* (1933) church, by Cesare Bazzani (1873-1939), north of the Milvian Bridge, and the simplified classical pastel-coloured volumes of Alberto Calza Bini's (1881-1957) *Church of San Francesco Saverio* (1933) (Fig. 107) in the Garbatella garden suburb.

The Church of Ss. Pietro e Paulo (1937-41) (Fig. 108) in the EUR[350] also belongs to this model. Designed by a consortium of architects headed by Arnaldo Foschini (1884-1968), including Alfredo Energici, Tullio Rossi, and Costatino Vetriani the building represents a heavily simplified design of classical elements into a severe arrangement of pure geometric volumes – an odd composition of Fascist-Baroque, described by Muratore as posessing an 'icy stereometry.'[351] Situated in a pivotal position, on a hill, at the opposite extremity to the viale Europa, the building is part of the 'renewed city skyline' of the EUR.[352]

In the mid-1940s, Studio Forneris Favini designed the colossal Church of Santa Maria Regina degli Apostoli alla Montagnola (1947-54) (Fig. 109), an essay in monumental, simplified, industrial classicism, and in the final church of this paradigm, the *Church of San Giovanni Bosco* (1953-58) (Fig. 110) by Gaetano Rapisardi (1893-1988), represents, in a similar manner to Ss. Pietro e Paulo, though not as severe and on a larger scale, a simplified composition of pure geometric volumes and cut out voids similar to the earlier church of *San Felice da Cantalice* (Fig. 123), in the Tuscolana area of Rome. San Giovanni Bosco, built in a vast area of new housing also featured in La Dolce Vita, although it masqueraded as Ss. Pietro & Paulo in the EUR. It is, along with Martiri Canadesi (fig. 129) and S. Pietro e Paulo, an iconic image of modern Rome.

The Church of San Giovanni Bosco, [353] is a monumental building that relates proportionally to the blocks of housing around it. It consists of a large travertine-clad concrete orthogonal volume, surmounted by a cylindrical drum with two ranges of pilasters, and shallow cupola, and a secondary drum with cupola above the sanctuary. An open campanile defines each corner of the composition to the rear. The front façade is divided into seven panels, separated by pilasters, with the three central panels defined by

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[350] *Esposizione Universale Roma* is a Fascist regime planned urban area connected to Rome. It was built originally to host the 1941 world's fair, which was eventually held the following year to commemorate the regime's twentieth year in power. See Kirk, T. (2005) *The architecture of modern Italy: volume 2: visions of utopia 1900- present.* New York: Princeton Architectural Press, pp. 133-6.

[351] Muratore, G. (2006) 'Architetti romani del Novecento nella metamorfosi dello spazio sacro.' *In* Mavilio, S. (ed.) *Guida all'architettura sacra Roma 1945-2005.* Milan: Mondadori Electa S.p.A., p. 16

[352] Ibid.

[353] St. John Bosco was a nineteenth century figure - one of a number of Pius XI' canonizations which, amongst other papal acts, demonstrated a 'counter to contemporary secularism'. See Kelly, J. and Walsh, M. (2005) *Oxford Dictionary of Popes*. 2nd ed. Oxford: Oxford University Press., p. 322.

deep voids. A high relief panel completes the rectangular opening of the central void. Four niches housing statuary are arranged along the rest of the façade. Behind the façade is a transitional atrium area, before the main liturgical space inside. Its linear plan form, defined by twelve piers, consists of three zones, the lateral spaces housing side-chapels.[354]

In their composition of simplified geometric volumes, Ss. Pietro & Paolo and S. Giovanni Bosco demonstrate a parallel relationship to the volumetric abstraction of Gillespie, Kidd & Coia's churches, beginning with the tall entrance volumes of St. Columbkille's and St. Columba's, and ending with the great blocky mass and separate campanile of St. Bride's (111). Had St. Paul's, Glenrothes received the planned cylindrical hall, it too would have significantly exploited an almost cubist arrangement of volumes as the visitor moved through the site and into the church.

Fig. 106 Immacolato Cuore di Maria, Rome (1923), Armando Brasini

[354] Mavilio, S. (ed.) (2006) *Guida all'architettura sacra Roma 1945-2005.* Milan: Mondadori Electa S.p.A., p. 135-6.

Fig. 107 San Francesco Saverio, Rome (1933), Alberto Calza Bini (author)

Fig. 108 Ss. Pietro & Paolo (1937-41), Arnaldo Foschini, Alfredo Energici, Tullio Rossi & Costantino Vetriani (author)

Fig. 109 Santa Maria Regina degli Apostoli alla Montagnola, Rome (1947-54), Studio Forneris Favini (author / Cath Keay)

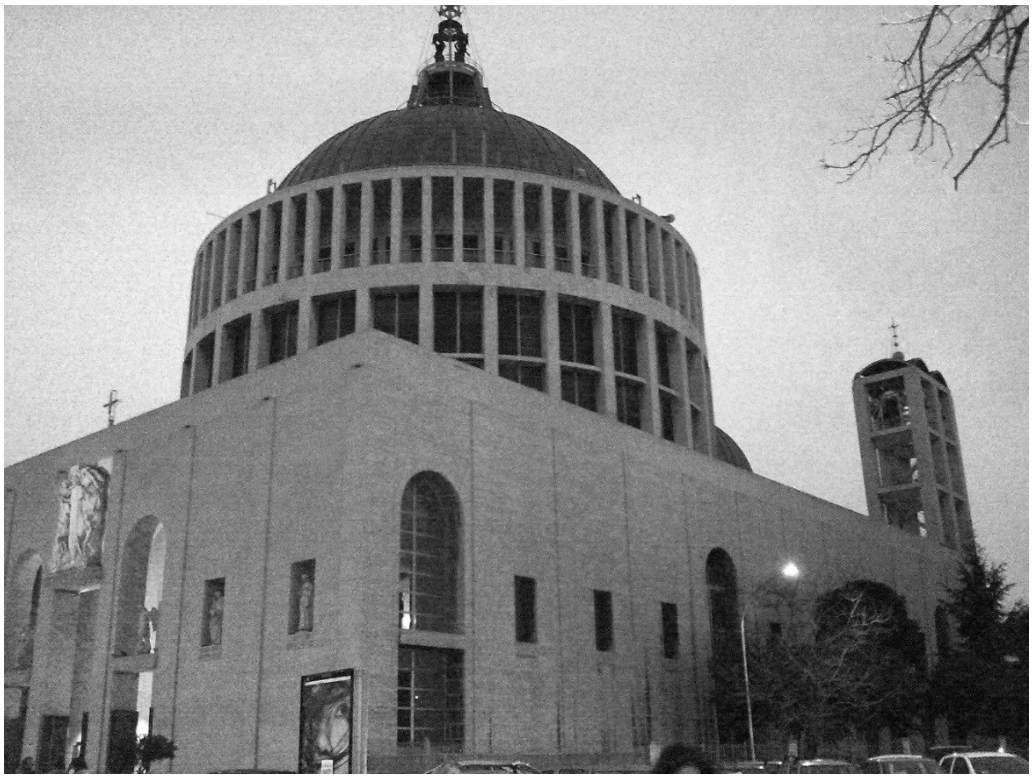

Fig. 110 San Giovanni Bosco (1953-8), Gaetano Rapisardi (author)

Fig. 111 St. Bride's, East Kilbride (1963-4), Gillespie, Kidd & Coia

Brick Massing

An abstracted brick massing describes the next model, and this encompasses a significant number of churches built from the 1930s to the early 1950s. They vary in rationalism, but all are linked in pared-down, predominantly brick-built stylistic abstraction. The first of these is Marcello Piacentini's (1881-1960) Cristo Re (fig. 112), a minor basilica in the Vittoria district of Rome, on the west bank of the Tiber. Although this building is one of the most striking and austere of this group of churches, it began life as a far more traditional design, which survives in its overall footprint. The church of Christ the King was begun in 1924, but not completed until 1934. Its austerity derives from a strict rationalising of geometry, its arrangement of simplified volumes, and its rigidly striated Roman brickwork. The brickwork, although more pronounced, has a similarity with the deeply raked mortar beds at St. Anne's, Dennistoun (fig. 113). It is a large, orthogonal brick church with an attached campanile on each corner of the front elevation, and a hemispherical apse expressed externally in a semi-circular brick colonnade. On the main façade are three typically basilican entrances, with the central opening higher than the flanking doorways. This arrangement exists on the side elevations, treated as very short,

wide transepts. This arrangement describes the principal and secondary axes internally. The modernity of the abstract brick design contrasts heavily with the more traditional layout and triple entrance arrangement.

From the beginning of the 1930s, a succession of blocky brick churches were designed and built. These include Clemente Busiri Vici's (1887-1965) San Roberto Bellarmino (Fig. 114) and Sant'Ippolito Martire (fig. 115) both in 1932-33, and the Nativita di Nostro Signore church by Tullio Rossi (1903-1997) in 1940 (fig. 116), Santa Galla (1940) (fig. 120) and San Giovanni Battista di Rossi (1940) (fig. 121), both also designed by Rossi. Giuseppe Zander's San Leone Magno followed in 1952 (Fig. 122). Some of these share Gillespie, Kidd & Coia's signature high, plain, rectangular front façade, in the examples of St. Columbkille's (fig. 119), St. Columba's (117) and St. Peter in Chains (118). Echoes of Early Christian basilicas such as San Lorenzo fuori le Mure – a pilgrimage church newly accessible to the masses in the early decades of the twentieth century - appear in the flat, rectangular entrance fronts, though these are greatly emphasized in the twentieth century models. The Church of San Leone Magno echoes the language of Cristo Re in its sharply geometric aesthetic; a severely square entrance front concealing a more conventional basilican volume and trabeated interior, behind. Again, deeply striated reddish brickwork addresses the approach to the building. This is all the more impactful due to its starkness. The main entrance and two smaller, flanking doorways corresponding with side-aisles are relatively small in the entirety of the composition – and widely-spaced, further emphasizing the brickwork. A rose window is reinterpreted as a circular aperture animated by overlapping, arched tracery, radiating around a central, smaller circle. A substantial campanile, whose plain brickwork is relieved at the top by bands of pale-coloured stone, is attached to the west side of the front elevation.

The dedication of Busiri Vici's church to Saint Robert Bellarmino (1542-91), a doctor of the church, directly responded to one of a number of declarations by Pius XI as part of his attempt to oppose secularism.[355] The church squatly addresses Piazza Ungheria; a basilican composition clothed in homogenous rather than striated brownish brickwork. The principal façade simply echoes the pitch of the pantiled roof behind, rather than masking it behind a semi-autonomous, higher front façade. San Roberto Bellarmino also exhibits a widely-spaced tripartite entrance, although here it is somewhat obscured beneath the pantiled, lean-to entrance canopy – again, an acknowledgment of the medieval basilica model – which links a low octagonal campanile at each corner of the principal elevation.

[355] Kelly, J. and Walsh, M. (2005) *Oxford Dictionary of Popes*. 2nd ed. Oxford: Oxford University Press, p. 322.

The other notable feature of San Roberto Bellarmino is the expression of window apertures. Here, the rose window gives way to a type of flattened octagon, divided into three portions by two mullions, and described by a thin frame of stonework. Similar fenestration, exhibiting stained glass, is found at clerestorey level on either side of the church.

Sant'Ippolito Martire is a stocky, roughly-textured buff brick composition on an elevated site on the via di Sant'Ippolito, closely incorporated into the surrounding urban weave. Volumetrically, the church is composed of an intriguing arrangement of cuboidal volumes, despite its more conventional basilican layout. A large and deep, flat-topped element creates the entrance to the building, which apart from the great central arched entrance and smaller lateral arched doorways, is arrestingly and provocatively blank – blind even, due to the complete absence of any aperture other than those used for access. Instead, the interior is illuminated by way of the fanlight over the central doorway, and by a small oculus on each of the side elevations of the entrance volume. The length of the nave is illuminated by small, round-headed windows filled with stained glass, while again, at the opposite end to the entrance, the sanctuary wall has no apertures or even concealed lighting. Instead, a triptych of round-headed niches displaying biblical scenes, terminate the principal axis. A contra-axis exists in the wide transepts, though these do not extend far beyond the plane of the side walls. The transepts are expressed as pitch-roofed volumes, with that of the south side transmuting into a low, muscular campanile above the apex of the roof. Internally, the architect exploited the cubic volume with white-painted rectangular-section reinforced concrete frames, connected along the length of the space with square-section purlins, also on show.

Nativita di Nostro Signore continues the preoccupation with plain, boxlike compositions, particularly those with flat, rectangular entrance volumes with little fenestration and a celebration of the textural qualities of large expanses of brickwork. In this respect it is one of the most similar in massing and material aesthetic to Gillespie, Kidd & Coia's tall rectangular entrance volumes. Here, the entrance volume, as with Santa Maria Addolorata, turns outwards in a curved cornice, in the manner of San Lorenzo, but Nostro Signore, similarly to Sant'Ippolito, has a perfectly flat top. The entrance volume at Nostro Signore wraps round the end of the basilican volume behind, giving the impression of a deep rectangular block. Dynamism is applied by way of a vertical recession in the brickwork above the main entrance, acting to frame the upper portion of the wall around the oculus. A campanile occupies the north-west corner of the complex, being attached to the front elevation by the lower volume of the side-aisle. Behind, a pantiled pitched roof surmounts the main liturgical space, a simple nave with side-aisles and no transepts.

Internally, a more traditional arrangement of loadbearing, buttressed side walls bridged by timber roof trusses, defines the nave, with arched rather than trabeated openings into the side-aisles, which are covered by groin vaulting. Fenestration varies again in the appearance of an oculus window on the front elevation displaying a simplified radiating pattern overlaid by quadrants formed from a crossing transom and mullion. Along the nave walls, windows are vertically orientated with transoms and mullions forming a cross.

1929 marked the completion of the restoration of the Church of Santa Balbina in Rome. The potential significance of this church is significant in the later churches of this category; San Felice da Cantalice (Fig. 123), designed by Mario Paniconi and Giulio Pediconi in 1934, San Saturnino (Fig. 124), designed by Clemente Busiri Vici in 1935, and Ss. Fabiano e Venanzio (Fig. 125) also by Busiri Vici in 1936. The simple arched openings and shallow pedimented roof of Santa Balbina's principal elevation translate into the metaphysical, slightly odd architectonic qualities of these three churches, which are characterised by the play and articulation of solid and geometrically delineated voids.

San Felice da Cantalice is configured around a single axis, characterized by one vast nave which functions simultaneously as a space to be used in its own right, and as a generator of smaller spaces – in this case a series of equally sized smaller rooms such as the confessionals, and the laterally positioned chapels. These are all connected by a peripheral, narrow walkway on each side of the nave. Near to the altar are two spaces in which are situated minor altars, creating a transverse secondary axis, and taking the place of a traditional transept. This generates, with the intersection of the principal access, the notional crossing, marked also by the ceiling. This is architecture with a serious function – but it is fun – almost pure art deco in places. Entry into the building recalls the experience of entering a vast grotto – a temple to the imagination, which belies its exterior. It is lit by stained glass clerestorey fenestration, producing a multi-hued twilight within. The circular columns are clad in tiny coloured mosaic tiles, and individual architectural elements are expressed in a simplified geometry. Cruise-liner characteristics penetrate even this religious building, with horizontal metal balustrading accompanying semi-circular half-landings, reflecting the circular form of the columns. The altar is lit indirectly from above by a ziggurat-section aperture, in place of a dome, and behind the altar, a fantastical fresco forms the curved apse wall, and it is framed, stage-set-like, by two circular columns.

The exterior, characterized by its temple-like porticoed ante-space or narthex, which echoes the tripartite façade behind, directly reflects the width of the nave. In this case, however, it does not reflect the internal spatial organization (as the two ancillary entrances do not accord with side aisles, which have here been reduced to mere narrow walkways

between the nave and the ancillary spaces on each side), but helps to accentuate the verticality of the façade. Of note is the striking manner in which the surfaces of the building have been treated almost as a literal translation of the earth. Situated on the main façade above the main entrance, the vaulted ceiling of this ante-space is painted the colour of sky, and portrays the painted figure of Saint Felice, levitating, as though midway between earth and heaven. This is the work of Rodolfo Villani (1881-1941) and this method of frieze-type painting is strongly reminiscent of de Chirico. Along with Antonio Calcagnadoro and Paolo Paschetto, Villani was part of the 'postunification tradition' of mural painting on public buildings[356].

There is also a similar approach closer to home in some of the ecclesiastical work of Gillespie, Kidd and Coia. The Roman Catholic Pavilion of 1938 (fig. 126) displays a similar geometrical simplification of architectural elements, which, in their plainness, are used as backdrops for external paintings depicting scenes from the Catholic faith. The external finish of San Felice da Cantalice is rough, ivory-coloured render with the base and horizontal bands in peperino, which is a composite stone of lava and tufa, from Viterbo. The construction is executed entirely in reinforced concrete, and also left on view internally as an acknowledgement of modernity, technology and expressive solutions. In this manner, it is and strongly reminiscent of Piacentini's Cristo Re and is directly contemporary with it.

Busiri Vici's San Saturnino exhibits simplified architectonic forms, in the same manner as San Felice da Cantalice and, to an extent, the church of Ss. Annunziata, Sabaudia (fig. 127), and these define the mass of this church and equally the great, concave void gouged from the entrance front, and forming a single point of entry to the building. The church is executed in buff brickwork with a pale coloured stucco band below the roof line. Volumetrically, this large church has an entrance front that overshoots the height of the nave behind. Two sets of transepts feature in this example; the first pair immediately behind the entrance front, and the second more conventionally situated before the sanctuary, with the south-east transept rising to form a pitched-roofed brick campanile. All of the related volumes of space are covered in pitched, pantiled roofs. In the fenestration, a similar approach to Rossi's Nativita di Nostro Signore can be discerned, with cross-forms acting as transoms and mullions to sub-divide the glazing. Busiri Vici displays a similar approach to the plain interior as at Sant'Ippolito Martire, where it is held by a series

[356] Bordini, S. (1999) 'Le decorazioni murali del Ministero della Pubblica Istruzione: Calcagnadoro, Paschetto e Villani.' *Ricerche di storia dell'arte*, 67, pp. 23-38.

of double concrete-framed bays and emphasised in its plainness by a complete lack of side-aisles.

Busiri Vici ‘s activity in 1930s Rome took a strangely different turn with the sublime church of Ss. Fabiano and Venanzio. Although in massing, the church is similar in feel to previous examples; a tall entrance front concealing a large nave with side-aisles, angled apse and attached campanile (this time on the north side of the building), it is the expressivity of the materials and details that are conspicuous and extraordinary. Viewed from a distance, the church appears as an abstract distribution of cubist forms, jostling and overlapping in their pale buff stucco covering, but most noteworthy is the entrance elevation. Though a recurring point of interest in both the Roman examples and in Gillespie, Kidd & Coia’s early churches, at Ss. Fabiano e Venanzio, the entrance is set beneath a thin, flat concrete canopy, fixed within a deep, ziggurat architrave. Above, the concrete canopy connects an ancillary entrance to each side, similarly expressed within a stepped, recessing architrave on an angled, projecting vestibule. Above each lateral entrance, and on the principal elevational plane, an oculus window fixes each otherwise blank, stuccoed façade. In between, and then in a similar manner to San Felice da Cantalice, is probably the most striking aspect of the composition. The central tableau – a great, gabled, seemingly paper-thin stuccoed screen with a small central carving in high relief featuring an eagle and surmounted by the crossed keys of St. Peter – evocative of papal authority and particularly that which was granted by Pius XI on his creation of the surrounding new parish in 1933. Above, the screen is crowned by three round-headed arched voids, only seeming to emphasize its thinness and eerily framing only sky beyond. The central void is detailed with the thinnest metal cross and rises above those at each side. Behind, the height of the entrance screen is brought back to the main bulk of the building with angled buttresses.

The final sub-group within this model are a pair of churches built in the 1940s and early 1950s. The church of Santa Galla (fig. 120) on the Circonvallazione Ostiense, on the edge of Garbatella was completed in 1940 by Tullio Rossi, and San Fillipo Neri in Eurosia(fig. 128), in Garbatella, was completed in 1952 by the architect Pier Luigi Maruffi. These echo the high front, pedimented elevation and colonnade elements of the Church of San Giorgio in Velabro, which was restored in 1924.

Fig. 112 Cristo Re, Rome (1924-34), Marcello Piacentini (author)

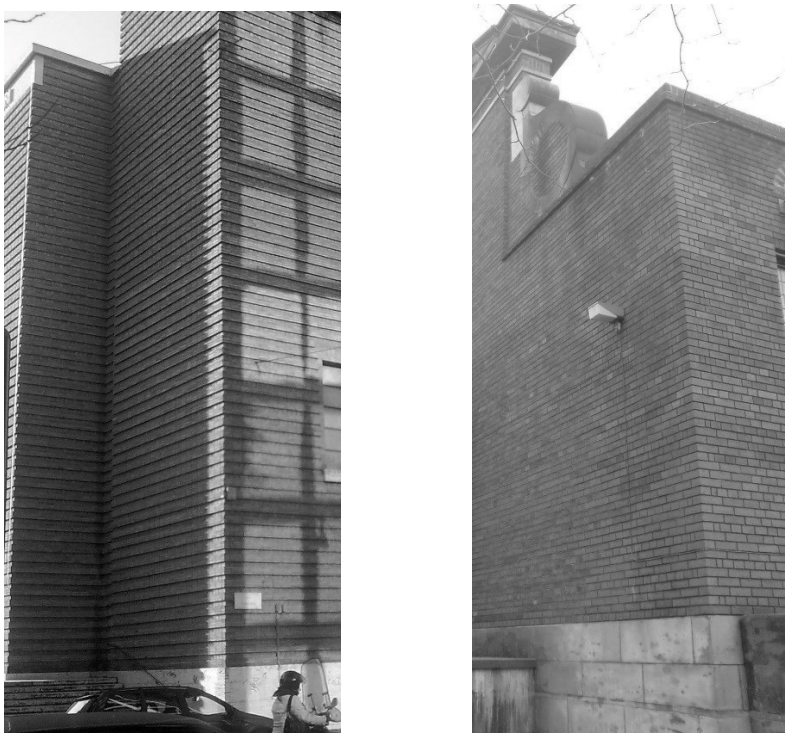

Fig. 113 Striated Roman brickwork at Cristo Re, Rome (1924-34), Marcello Piacentini (left) and St. Anne's, Dennistoun (1931-3), Gillespie, Kidd & Coia (right)

Fig. 114 San Roberto Bellarmino, Rome (1932-3), Clemente Busiri Vici

Fig. 115 Sant'Ippolito Martire, Rome (1932-3), Clemente Busiri Vici

Fig. 116 Nativita di Nostro Signore, Rome (1940), Tullio Rossi

Fig. 117 St. Columba's, Woodside (1937), Gillespie, Kidd & Coia

Fig. 118 St. Peter in Chains, Ardrossan (1938), Gillespie, Kidd & Coia

Fig. 119 St. Columbkille's, Rutherglen (1934-40), Gillespie, Kidd & Coia

Fig. 120 Sta. Galla, Rome (1940), Tullio Rossi

Fig. 121 San Giovanni Battista de Rossi, Rome (1940), Tullio Rossi

Fig. 122 San Leone Magno, Rome (1951-2), Giuseppe Zander

Fig. 123 San Felice da Cantalice, Rome (1934), Mario Paniconi and Giulio Pediconi (author)

Fig. 124 San Saturnino, Rome (1935), Clemente Busiri Vici (author)

Fig. 125 Ss. Fabiano & Venanzio, Rome (1936), Clemente Busiri Vici (author)

Fig. 126 Roman Catholic Pavilion, Glasgow Empire Exhibition (1938), Gillespie, Kidd &Coia

Fig. 127 Santissima Annunziata, Sabaudia (1935), Gino Cancellotti, Eugenio Montuori, Luigi Piccinato & Alfredo Scalpelli

Fig. 128 San Filippo Neri in Eurosia (1952), Pier Luigi Maruffi

Decorated Facades

Through close study, another pattern arises in the application of external decoration to the facades of churches. This is notable in its aesthetic contention with the plainer, brick massing of churches described earlier. Although some of these examples fall into other significant categories also, it was felt that there were a number of churches with this as a dominant characteristic. Their use of external decoration, whether through mosaics or painting, further acknowledges interest in the Early Christian basilicas of Rome, again contemporary with the renovation of Sta. Maria in Cosmedin. Whilst this particular church features no significant external decoration, other similar types are quite striking in this regard, particularly the twelfth century mosaics and paintings acting as a frieze on the church of Sta. Maria in Trastevere. In the twentieth century examples of Sta. Maria Addolorata and Sta. Croce al Flaminio, employing mosaic and painted scenes expound a similar pious theatricality. Later, Mario Paniconi (1904-1973) and Giulio Pediconi's (1906-1999) church of San Felice da Cantalice (1934) (fig. 123) uses the technique of façade painting in an altogether different way, combining it paradoxically with both a sense of depth and perspective and a haunting emptiness, similar to the work of de Chirico. In technique, it also demonstrates a similar simplicity of form and colour. Finally, Bruno Maria Appoloj-Ghetti's (1905-1989) unconventional Nostra Signora Ss. Sacramento e Santi Martiri Canadesi church (1952-55) (fig. 130) features a painted fresco on the entrance façade in a similarly simplified aesthetic, although the original intention was for it to be occupied by a sculpted panel instead.

Structural Expression

A further model focuses on structural expression, and can be sub-divided into two forms of concrete framed structure, evident in Roman churches in the 1950s. The first of these is again Appolonj-Ghetti's Martiri Candesi church, where it is expressed internally as a series of structural parabolic concrete ribs (fig. 131). The other significant example of this type of structural expression is a church concomitant with this; Ildo Avetta's (1916-2011) outlandish and remarkable Sacro Cuore di Gesu Agonizzante (1953-55) (figs. 132 & 133), where concrete rib vaults are expressed both internally – and although clad – externally too.

Nostra Signora Ss. Sacramento e Santi Martiri Canadesi, or the Canadian Martyrs church – the national church of Canada in Rome, was built from 1952-55 by Bruno Maria Appolonj-Ghetti. It consists of a large cubic volume surmounted on a travertine base, as if rough-hewn from the quarry. The principal elevation, articulated in pilaster strips down to the point of entrance, displays a central plastered area, originally intended to receive a

sculpted decoration. As mentioned, this area has now been decorated with a painted fresco. The side elevations are characterized by their projecting volumes, in brickwork, modulating and corresponding with the internal structure.

As in the UK, an awareness of such precedents as Easton & Robertson's RHS Floral Hall on parabolic structural arches existed in Italy too. Marcello Piacentini was aware of concrete rib frames of that particular building as early as 1930.[357] Interest in modern Gothic structure may also be linked to interest in contemporary industrial structures such as the parabolic concrete motorway arch near Florence (fig. 129), designed to protect the carriageway from an overhead cable car[358] and in the elegant stone crypt of Amerigo Bartoli and Luigi Brunati's bizarre fascist Monumento Nazionale al Marinaio at Brindisi (1933), an intensely introverted, sepulchral space top-lit with small oculi piercing the top of each structural bay.[359]

Fig. 129 Parabolic reinforced concrete motorway arch near Florence (1933)

Martiri Canadesi features in Federico Fellini's 1959 film, La Dolce Vita, and the interior, then recently completed, was used as the setting for an encounter between the main

[357] Piacentini. M. (1930, reprinted 1994) *Architettura D'Oggi*. Libria-Melfi: Italy. P. 154.
[358] Architettura e Arte Decorativa (1933) 'Costruzione utilitarie in cemento armato.' *Architettura e Arte Decorativa*, July 1933, pp. 437-9.
[359] Architettura e Arte Decorativa (1934) 'Monumento nazionale al marinaio.' *Architettura e Arte Decorativa,* February 1933, pp. 65-71.

character, Marcello, and his intellectual friend, Steiner, to the background of Bach's Toccata and Fugue. The interior is sublime – a still, yet dynamic space, mysteriously lit by high, stained glass clerestorey fenestration. The main liturgical space, with nave and side-aisles, quadrangular apse and galleries, is preceded by a narthex, from which two flights of stairs lead down to the crypt and to the parish meeting room. Five great double parabolic arches, strangely gothic in feel, which are linked at the top by groin vaulting, give a particular dynamism and vertical modulation to the space. Above the main altar is a baldacchino with ceramic decoration, which takes its cue for its form from the motif of the arches. The chancel houses two pulpits and a wooden choir. The architectural quality of the space is enriched and shaped by light filtering through a profusion of stained glass windows. The confessionals are divided into eight compartments and are dominated in the centre by three mosaics. There are parallels Gillespie, Kidd & Coia's Saint Columba's, Woodside (fig. 134), and Saint Laurence's, Greenock (fig. 135). At St. Columba's, there is a similar monolithic, rectangular entrance elevation and simplified Gothic structure internally, and at St. Laurence's there is, again, a similarity of structure. Appolonj-Ghetti's church (1952-5) follows St. Columba's and is contemporary with St. Laurence's, suggesting a parallel of ideas and motifs. The crypt, in the lobby of which one finds enclosed by a hexagonal balcony the mosaic-clad baptistery, reflects the spatial organisation of the church above, and is characterized by its lateral rows of low concrete arches.

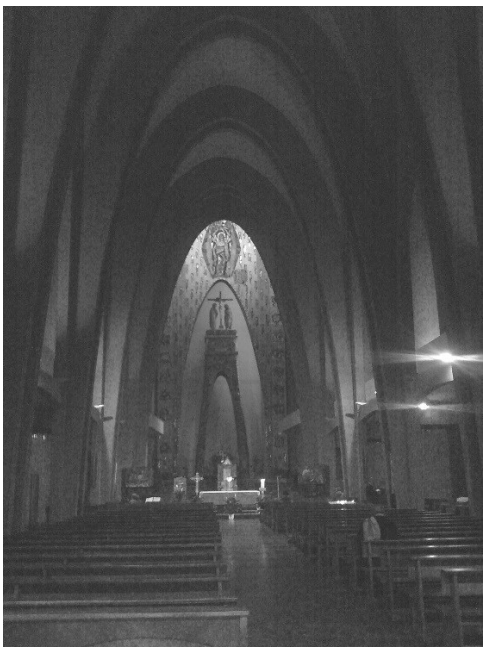

Fig. 130 (left) Nostra Signora Ss. Sacramento e Santi Martiri Canadesi (1952-5), Bruno Maria Appolonj-Ghetti (author)

Fig. 131 (right) Concrete arched structure at Nostra Signora Ss. Sacramento e Santi Martiri Canadesi (1952-5), Bruno Maria Appolonj-Ghetti (author)

Ildo Avetta's Sacro Cuore di Gesu Agonizzante, in Vitinia, to the immediate south-west of Rome, is explicitly described by its structure, a very strong sense of which can be discerned from the exterior in addition to the interior. The building is fundamentally a single entity with a separate campanile in the north-west corner of the site. Approaching from the east and from the Via Sant'Arcangelo di Romagna, first encounters of the church are as peculiar as they are thrilling and provocative; an intoxicating composition featuring a large central stone screen composed of large panels of pale grey travertine, and outlined in the form of the parabolic arches that describe the length of the space behind, with similar reference to St. Columba's and St. Laurence's. Piercing this, above the elevated level of the main entrance which itself is arrived at by a sweeping, cantilevered concrete staircase on each side, is a constellation of small, star-like apertures, becoming more elongated as they descend. Flanking this central feature, the first pair of parabolic arches, externally sheathed in randomly-sized squared blocks of honey-coloured stone, angle inwards, further emphasizing the central screen, which appears to project forward as a result.

Along the length of the building, similar angled stone revetments allude to the presence of repetitive structure behind. In between, bulbous white-stuccoed bays with coloured clerestorey glazing swell out; as if expanding between the ribs, and the curved sweep of the pink, fish scale-tiled roof, which begins just above their eyebrow-like concrete tops. This church, like the Canadian Martyrs, features a slightly raised volume above the sanctuary, indirectly and eerily illuminating the space below from high-level peripheral coloured glazing.

Internally, an intense hall of coloured light and shadows reveals the concrete rib-vaulting with stuccoed infill in between, the gallery over the narthex with randomly patterned metalwork balustrade, individual timber confession boxes and mysterious light and darkness of the sanctuary.

Another related type uses reinforced concrete portal-type frames such as those used at Marco Piloni's Sta. Maria della Mercede, Rome (1958), and at Augusto Baccin's San Basilio, Rome (1965-6) which again are only expressed internally.

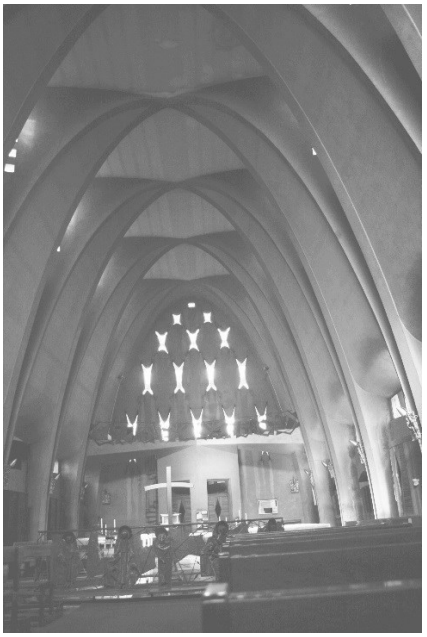

Fig. 132 (left) Sacro Cuore di Gesu Agonizzante (1953-5), Ildo Avetta (author)

Fig. 133 (right) Internal framed structure at Sacro Cuore di Gesu Agonizzante (1953-5), Ildo Avetta (author)

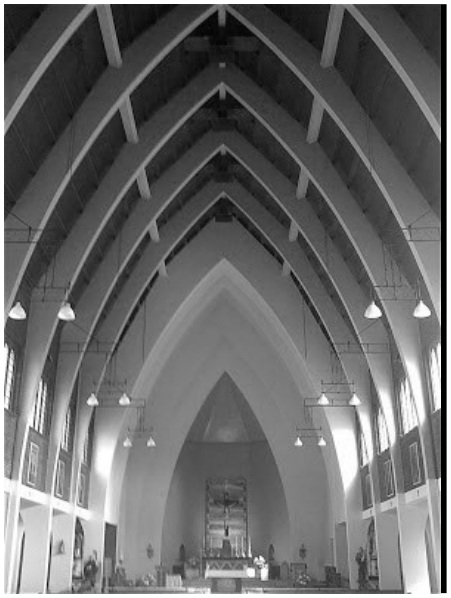

Fig. 134 (left) Internal framed structure at St. Columba's, Woodside (1937), Gillespie, Kidd & Coia (author)

Fig. 135 (left) Internal framed structure at St. Laurence's, Greenock (1934-40), Gillespie, Kidd & Coia (author)

Fig. 136 (left) San Basilio (1965-6), Augusto Baccin (Mavilio)

Fig. 137 (right) St. Charles, Kelvinside (1959), Gillespie, Kidd & Coia

Fig. 138 Santa Maria della Mercede(1958), Marco Piloni (author)

Fig. 139 St. Charles, Kelvinside (1959), Gillespie, Kidd & Coia (author)

Conclusion

Italy was keen to be seen as a modernising nation, yet one that retained a strong sense of her national traditions. In the 1930s, Pius XI, spurred on both by a desire to be seen as a modernising Pope, and in an attempt to defend the Church against the perceived problem of secularism, initiated a church-building programme, providing foci of worship for large new housing estates emerging around the city, as well as in existing parishes.

The churches built were eclectic in form, layout and structure, and many attempted to combine a modern aesthetic or structure with traditional models of ancient churches that had been recently renovated. A parallel exists in a number of Gillespie, Kidd & Coia churches, both in the Early Christian and Romanesque ecclesiastical models of Rome, and in common twentieth century precedents. Influential figures such as Marcello Piacentini, key architect in the Fascist regime, was conversant with an array of work of early twentieth century architects who had designed both ecclesiastical and secular buildings.

Conclusion

In the final part of this study, we return to the question posed at its outset; *how might we reconsider the reputations of Jack Coia, Isi Metzstein and Andy MacMillan, and in so doing, shed light on the ecclesiastical work of the practice as a whole?*

The three parts of the study have provided a framework for interrogation of the practice's history, their client context, detailed examination of their design work, and a backdrop to examine their international standing. Drawings and comparative detailed discussions have gathered together work previously unseen through the same lens of investigation and in the same place. These structural and methodological approaches account for *how* it has been possible to re-assess practice reputations. The answer to we might re-assess those reputations therefore points to a wider view of the practice's ecclesiastical repertoire through examination of its history, client, work, and parallel context. Clearly, the practice emerged from a specific background and developed due to the decisions of the numerous individuals involved, however, the study has attempted to discuss the firm's varied work on its own merits, and without undue reference to the architects as individuals.

Practice highlighted one of the most significant themes; the number of staff employed by the firm. This demonstrates a firm that could only have operated by virtue of a critical mass of staff at any given point. Even with the firm's enforced temporary closure during the war years, it would take until the early 1950s for building work to resume to the same intensity, if not greater, than before the war. This was only possible as staff numbers rose again in tandem with the number of ecclesiastical commissions. *Practice* also examined continuities with the practice in its previous business guises. It can be argued that this accounted both for Gillespie, Kidd & Coia's use of modern construction methods at the start of the newly namd practice (for example, the concrete framework of Lion Chambers influencing the Ca d'Oro extension), and its collaboration with artists. Equally, in their later practice, the engagement of artists were important in the conception of modern design schemes, and the way in which the practice was perceived by its client, illustrated in the 'modern church and modern cross' of St. Paul's, Glenrothes.

In patronage terms, the Roman Catholic Church in Glasgow, and in Scotland as a whole, had been re-established in 1878, and as the second half of the nineteenth century progressed, it was conscious of the increasing size of the Catholic community in the Archdiocese of Glasgow. The Church had foreseen the later fragmentation of the expansive Archdiocese of Glasgow into its modern suffragan sees, and when the time

came, it coincided with the post-war state-led provision of housing in planned new estates, modernist efficiencies and community-centred ideas of architectural design, and the coalition of liturgical reform that had been active since the start of the twentieth century.

In the period leading up to the 1930s, following the re-establishment of the Catholic Hierarchy, the Catholic Church, initially through Archbishop Eyre, had begun to build more churches, initially in the Gothic idiom of Pugin & Pugin, with interiors convenient for the connection of the laity to the sanctuary. Later, patronage of churches in a variety of denominations, saw ecclesiastical design change as a general trend for the reduction of superfluous details, stylistic simplification, and the use of new or more economical materials in the wake of interwar financial austerity. Simultaneously, the Archdiocese of Glasgow's patronage of Gillespie, Kidd & Coia existed at a time of conscious expansion of the Roman Catholic Church's ambitions towards Glasgow's Catholic community during a climate of institutional apprehension towards secularisation and political ideologies, and later, large-scale social movement and dispersal around a city in a state of planned geographical change.

As a firm, Gillespie, Kidd & Coia insulated themselves as far as possible against the loss of ecclesiastical patronage, by positioning themselves physically at Park Circus within the sphere of influence of the Archdiocese of Glasgow. This, arguably, was a move that secured commissions and continued patronage under a succession of Archbishops until Coia himself retired in the mid-1970s.

In *Architecture,* despite the quantity of information examined through liturgy, plan, the sectional manifestations of structure, light, volume and materials, what became apparent was the catholicism of the firm's design approaches. The practice's interwar work was still a product of traditional liturgical observance, and it *was* transitional, but not only for the reasons stated by Coia. In addition to the stylistic and material aspects of their design, these churches also reflected the more generic Vatican-led recommendations concerning the modelling of internal space to benefit the laity. Certain also pointed to future centralised layouts, either in the broadness of St. Anne's, or the relationship of sacramental elements such as the altar and baptistery at St. Columbkille's. The period also highlights volumetric articulation in the entrance towers of St. Columbkille's and St. Columba's, and in the entrance tower and abstract massing of the campanile in St. Peter-in-Chains and in the connected geometric elements of the Roman Catholic Pavilion. These interests then correlated with the partially disconnected campanile of Holy Family, and later the fully independent campanile at St. Charles Borromeo. At St. Bride's, East

Kilbride, this would in turn create an exterior arrangement of space contained by built elements, paralleling a trend for the *promenade architecturale*.

Post-war designs broadened the basilican plan type into co-existent layouts such as idiosyncratic triangular plan forms, the first of which, St. Paul's, Glenrothes, correlates with the starting point of the exhibition and publication, *Gillespie, Kidd & Coia, architecture 1956-1987.* However, strands of design co-existed and at times merged, for example at St. Charles Borromeo, which employed a simple basilican layout, but was built using modern materials and construction techniques, combining a picturesque siting with full or semi-separated built components, serving contemporary liturgical foci with a picturesque siting, where the campanile acted as a landmark.

This phase is characterised by the phenomenological experience of churches as objects, rather than a largely pre-ordained movement sequence up to and through the building, as had been the case earlier.

The final phase, after the Second Vatican Council, more directly focuses on the worshipping experience with emphatically introverted spatial programmes. Indeed, external interest is largely minimised in the cases of Sacred Heart, Cumbernauld, St. Margaret's, Clydebank, and St. Columba's, East Kilbride.

Lighting analysis revealed that the first churches relied mostly – but not exclusively – on general lighting of the space itself and not only directed on specific foci, for example the altar. More varied and dramatic conceptions of lighting space, perhaps with the exception of the Roman Catholic Pavilion, arrived in schemes designed after the Second World War, and were in part linked to narrative investigations of liturgical sequences through the church. The last commission, St. Columba's, East Kilbride, relied on the simplest liturgical message; a single source of natural light above the altar.

While Gillespie, Kidd & Coia's churches initially conformed to more widely used stylistic and material trends, they were acknowledged to have borrowed from an eclectic palette of design references. The reference points for some of the later examples such as St. Bride's, were openly acknowledged in modernist design terms. The firm's eclecticism, framed by their prolific design activity over five decades, re-directs them from a uniquely British context and places them within a more international frame of reference. An exemplary international parallel exists in the new churches that were built in Rome from

1930. Built to 'preserve the faith',[360] the churches were located both within the existing city parishes and in vast areas of new housing, some of which was planned and built outside the Aurelian walls. In their provision of new places of worship for an expanding population, there are similarities between Rome and Glasgow in their experimentation, expression, and sources. A comparative study over a long period of time revealed design patterns that displayed certain physical similarities between the Glaswegian and Roman churches, which might otherwise not have appeared in a more selective focus on Gillespie, Kidd & Coia.

The re-assessment of the reputations of Coia, Metzstein and MacMillan using the investigative methods of the three-part approach to the study, then, has allowed light to be shed on the practice as a whole, emphasising its collective rather than individual nature, by virtue of this broad approach.

[360] Breccia Fratadocchi, I. (2006) 'La diocese di Roma nella seconda meta del XX secolo' In Mavilio, S. (ed.)Guida all'architettura sacra Roma 1945-2005. Milan: Mondadori Electa S.p.A., p.23.

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Appendix: Gillespie, Kidd & Coia Church Inventory

St. Anne's, Dennistoun 1931-3

St. Anne's RC Church, Whitevale St., Glasgow (1931-3), Gillespie, Kidd & Coia. Source: Author (2007).

The church that was dedicated to St. Anne was built to house a growing Catholic community in the East End. The parish had originally been established in 1899 a short distance further south on David Street with the church housed in a former stable building beyond the railway line that crosses Whitevale Street.[361] After the opening of the new Gillespie, Kidd & Coia church on 17th December 1933, the substantial St. Anne's Parish was subdivided to form to new ones; firstly, St. Nicholas, and then Our Lady of Good Counsel.[362]

The opening of the church coincided with the jubilee year of 1933, an 'extraordinary' Holy Year called to mark1900 years since the Redemption,[363] and acting as a papal attempt to

[361] St. Anne's Parish website (2012) *History of the parish.* [Online] [Accessed on 25th February 2015] http://www.stannesdennistoun.moonfruit.com/past-and-present-church/4569011113

[362] Ibid.

[363] Vatican website (no date) *What is a Holy Year?* [Online] [Accessed 2nd May 2015] http://www.vatican.va/jubilee_2000/docs/documents/ju_documents_17-feb-1997_history_en.html

create a 'counter to contemporary secularism'.[364]

Its position about half way down the east side of Whitevale Street somehow seems a little incongruous with its volume and outward appearance; suggesting, rather, the termination of a vista or the set-piece in some well-considered urban scene.[365] This said, it is its relative anonymity within the urban weave of Dennistoun that renders its discovery all the more exciting, and this would set a pattern that the majority of Gillespie, Kidd & Coia churches would follow – that most are in suburban settings seems to both normalise these churches and emphasise their uniqueness.

In footprint and form, this is a largely homogenous design in the sense that its broadness relative to its length, and the low, arched vaulting of the ceiling, contribute to a sense of space approaching centrality; the axis of the (slightly longer) nave balanced by the counter-axis of the transepts. The sanctuary is expressed as an angled apse-end to the nave.

St. Anne's is a brick-built church surmounting a stone-block plinth, which countered the pedigree of pure stone, which had hitherto been favoured in ecclesiastical buildings in Glasgow. It is a building composed of varying architectural moods, the principal and side elevations differing from each other, and giving limited clues to the interior form and ambience. The church's Italianate front elevation has been well documented,[366] but it is only loosely so inasmuch as the classical motifs employed by Coia are picked out in a paler stone and muted, simplified or stylized. The west front addresses Whitevale Street in a very particular way that sees a gable end almost transformed into a tympanum, raised slightly above the main body of the nave. The width of the front elevation reduces above the level of the entrance, and simplified scroll brackets reconcile the resultant stepping in of the facade. Rogerson connects these to Santa Maria della Salute in Venice,[367] but there may equally be a historical precedent in the scrolls that mediate the different widths of the top and bottom volumes of the church, at St. Francesca Romana, Rome, or on Giacomo della Porta's façade of Il Gesu, Rome. The referencing of such motifs in Coia's first church establish a strong re-assertion of Catholicism in Glasgow,

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[364] The other years were 1925 (which was also the year of the establishment of the feast of Christ the King) and 1929. See Kelly, J. and Walsh, M. (2005) *Oxford Dictionary of Popes*. 2nd ed. Oxford: Oxford University Press. , p. 322.

[365] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson., P. 18.

[366] Ibid., p. 19.

[367] Ibid.

following the re-establishment of its Archdiocese in 1878 and more particularly the installation of Archbishop Mackintosh and Pius XI in 1922, in that churches such as Il Gesu became a model for the Catholic Church during the period of the Counter-Reformation.[368] Diane Watters suggests that the 'Gesu' similarity existed even before Coia's churches in those designed by Pugin & Pugin, but less directly and more in the aesthetic generated by their imposing, assertive presence on the Glasgow skyline.[369]

The tripartite entrance is expressed physically in relief from the brick facade, the top of the arches even being tiled to reflect their exposure to rain. Again, these are executed in stone, which contrasts to the deeply striated mellow russet of the long, Roman-style bricks. Each of the arched entrances is connected to the next, so that they are read as one entity rather than as three separate openings in the façade; a tryptich, in effect. Between this and the gable is a small, centrally-positioned circular oculus window, complete with spokes and central ring, framed with radiating brickwork. The facade is completed by a pediment – again, detailed in stonework, and broken at the apex with a carved stone figure of the Madonna and Child by Archibald Dawson,[370] broken also along its horizontal element.

The side elevations, although expressed in the same materials as the front, are surprising in their execution. Walls rise only to one storey immediately west of the transept, a mansard roof denying further height but providing the opportunity for tall, round-headed dormers. These arched windows are surmounted by the narrowest of voussoirs, seemingly flickering out from the arch, and lengthening towards the keystone.

The basilican plan is expressed here as a short transept with three tall, slender, round-headed windows beneath a central circular window, referencing the pattern on the front elevation. The angle of the mansard roof at its lowest point decreasing into a catslide that cuts back across the main section of the side elevation, reducing the second dormer to a high-level round-headed window only. The effect is picturesque rather than grandiose, though the round-headed windows are plainly ecclesiastical in feeling.

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[368] Miami University, Ohio. (no date) *The church of Il Gesu in Rome.* [Online] [Accessed on 8th March 2015] http://arts.muohio.edu/faculty/Benson/GESU/ [Accessed 08.03.15]

[369] Watters, D. (1997) *Cardross Seminary Gillespie, Kidd & Coia and the architecture of postwar Catholicism.* Edinburgh: RCAHMS., p. 14.

[370] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson., p. 19.

Beyond the transept, towards the east end of the building, a deeply recessed porch marks the hinge-point between the church and the presbytery, the latter being built at 90 degrees to the church; the whole ensemble forming an inverted 'L'-shape with the street; a large walled garden providing a transitional zone before the house. The house itself could have been symmetrical, but is not; the eye ever being led around sharp brick volumes or drawn into the recessed spaces created between elements of building. As with the church, the overall dynamic appears to rest with the horizontal – the relatively long, low, church; the sweeping hipped roof of the presbytery; the emphatic linearity of the brickwork. Yet at points, this is in contention with the strong vertical accents of the dormer windows on the church; and on the presbytery, a similar arched element with voussoirs (though not strictly a dormer), breaking through the cornice and hipped roof, marking the main entrance to an otherwise sober architectural composition. Tall chimneystacks balance the horizontal also, and on the south elevation of the presbytery disrupt the cornice in a similar manner to the arched element above the entrance.

A shallow bow window at ground floor level breaks the broad planes of the walls, but the mood continues; brick mullions and brickwork from the lintel to the parapet. Elsewhere, windows are multiples of a single casement with top light, being further divided into square components with glazing bars.

The crisp expanses of brickwork with recessed mortar joints takes on a sharply orthogonal quality in places, and echoes Frank Lloyd Wright's controlled use of brick, and Piacentini's intensely striated brickwork at Cristo Re (1924-33), though the Italian architect succeeded in creating a regimented bas-relief effect by the slight projection of alternate, three course-high bands of brickwork.

Internally, the church seems to respond to human scale and feels devotional in the warm brickwork and enveloping, white-painted, plastered barrel-vaulted ceiling, not hinting at the mansard structure above, and completely eschewing the pious loftiness of Pugin-type churches. Although a basilican plan in terms of nave, transepts and apsidal east end, at St. Anne's, the side-aisles are subjugated to short arcades.[371]

Inside the church, the ceiling is notable. Despite the original design intention of applying gold-leaf, natural light has a strong effect on its sense of plasticity. Unexpected effects are created, such as the groin vault created at the intersection of the nave and transepts;

[371] Ibid., pp.18-19.

and the dormer windows surreally bending their arched heads inwards to meet the barrel vault.

The punctuating verticals of the dormers break the horizontality of the building, expressed at floor level in the brick arcade. The barrel vault, marked by the spring-point of the brick arcades, acts as a kind of unifying element that seems to define the church's interior. The sense of humanity in scale and materials is reinforced by the timber craftsmanship of entrance doors, flooring and pews.

Constructionally, beneath the external skin of brickwork, contemporary materials such as reinforced concrete and the structural steelwork of the 'Ogment' system were used, which would have lessened the cost, for an Archdiocese that had to keep a very careful eye on its accounts.[372] It would have also lessened time, for this was the first of a series of churches commissioned by the Roman Catholic Church to cope with an expanding population and a re-structuring of parishes. At this stage, these materials were regarded as necessary but aesthetically subservient to the principal envelope of brick.

In a series of letters between Gillespie, Kidd & Coia and the Archdiocese of Glasgow, between May and July 1931, it is possible to gauge a sense of the relationship that the firm had with the Archdiocese at this inaugural stage of their collaboration. Much of the correspondence is addressed to the Archbishop's secretary, the Rev. James Ward, and deals with the tender process of pricing the building work at St. Anne's. One of the letters (dated 1st May 1931) is addressed directly to Ward;[373] a further two (dated 11th July 1931 and 13th July 1931) are addressed to him but for the Archbishop's approval;[374] and one is addressed directly to Archbishop Mackintosh himself. It is apparent from surviving records that a degree of respectful communication existed between architects and Archdiocese, and it seems reasonable that this was so at other stages of the project for which no documentation exists. We may also infer both that the Archdiocese had placed strict cost control on the project from an early stage, and that Gillespie, Kidd & Coia were at pains to exercise financial sense appropriately. In Coia's letter of 19th June 1931, an addendum to the main subject of contractor lists and updates on the preparation of pricing schedules, he cautiously refers to a sketch

[372] NB Carson & Gillies were the civil engineers who carried out the structural steel work at St. Anne's. They advertise this system of construction in the Post-Office Annual Glasgow Directory 1930-31

[373] Coia, J. (1931) Letter to the Archdiocese of Glasgow. 1st May. Source: GSA Archives.

[374] see Coia, J. (1931) Letters to James Ward. 11th & 13th July. Source: GSA Archives

drawing for the Sanctuary. He is keen to reassure the Archbishop, who had recently had the unenviable task of streamlining the Archdiocese's finances, that the expense of materials had undergone careful consideration;

(we) would point out that no marble other than the columns, caps and bases of the Baldachino has been used as a material of decoration.[375]

He further highlights his awareness of the cost connection between this and the other elements of the build, emphasizing its preliminary status.

Coia had already begun to experiment with contemporary thought on how architectural space should reflect the increasing emphasis on simplification and participation of the congregation in the liturgy, whilst still observing the traditions of the Tridentine Mass. This is demonstrated at St. Anne's in the substitution of conventional side-aisles with arcades, the placing of the choir above the narthex, and the design of a broad, open sanctuary, thereby increasing the physical connection with the altar.

St. Anne's was chosen by the Glasgow Institute of Architects, along with St. Bride's and St. Peter's College, to be opened to the public as part of the 1984 'Scotstyle' exhibition – part of the Britain-wide Festival of Architecture demonstrating the interest shown in the firm's earliest work, even after Coia's death.[376]

[375] Coia, J., Coia letter to the Archdiocese, 19th June 1931. Source: GSA Archives

[376] Hunter, W. (1983) *Festival of Architecture.* Letter to Gillespie, Kidd & Coia. 1st November.

St. Patrick's, Greenock 1934

St. Patrick's RC Church, Orangefield St., Greenock (1934), Gillespie, Kidd & Coia. Source: © Historic Environment Scotland (2016).

Following the success of St. Anne's, the second of Gillespie, Kidd & Coia's church commissions for the Archdiocese of Glasgow (now part of the Diocese of Paisley), was St. Patrick's, Greenock, in 1934, replacing an earlier church of 1924, built for the foundation of the parish.[377] The church occupies a tight, hemmed-in, triangular site in a steep location on Orangefield Street, close to the town centre. This allows for a variation in levels within the building, creating a frontage, which falls away with the incline of the street.

St. Patrick's could be said to be a development of St. Anne's, but it seems to represent a design philosophy in flux, rather than mere variation on a theme begun with the Dennistoun church. One of the most striking aspects of the church is its footprint. It is simply a nave with a sanctuary, lacking the transepts of St. Anne's. The physical

[377] St. Patrick's website (2015) *Some background information.* [Online] [Accessed on 25th February 2015] http://www.stpatricksgreenock.org/index.htm

restrictions of the site may of course have been a contributing factor to this decision, but it is not the only church in which the transepts have been omitted. Save for St. Columbkille's (1939), where notional transepts re-appear, but only vestigially in relation to the nave, none of GKC's pre- World War II churches retain them.

St. Patrick's is orientated almost north-south, with the main entrance on the north facade. Its single axis terminates in a sanctuary, which unlike St. Anne's, is articulated from the main longitudinal space, and expressed as a smaller, sectionally similar element of this. The awkwardly positioned composition of church and presbytery largely seems to take its cue from the adjacent pre-existing tenement blocks. The entrance front to the church is set back from Orangefield Street; otherwise the line extended from the tenements would have seen the front of the church collide with the street. The sanctuary end of the church extends almost the entire depth of the site, coming to rest on the north side of Holmscroft Street.

The presbytery follows the line of Holmscroft Street, and a car park now occupies the garden space between the street and the front of the house. The awkwardness of the relationship between house and church is, however, mediated by an open, semi-circular pergola with brick columns and carved masonry capitals, a hinge point between the two elements. This develops the similar relationship seen at St. Anne's between the different building elements; at St. Anne's, the square-section stone piers give onto a dark, introspective space, whereas the pivotal point at St. Patrick's is altogether lighter and more outward facing.

Materially, the church, again, is faced in reddish brickwork, though not the expressive Roman-type bricks and raked back mortar used at St. Anne's. The roof is very visible, and clad in slate. The elevation presented to Orangefield Street is read almost as a triangle, so significant is the mansard roof structure behind, in terms of height and pitch. There is a lower entrance to ancillary rooms, expressed as a single storey outrigger, which immediately addresses the road, in scale and proximity, and provides stepped access up to the main entrance above. There are two principal axes at St. Patrick's – horizontally via the nave of the church and very emphatically through that almost gouged out vertical of the principal facade. This generates a dynamism and visual concentration on an otherwise plain, brick wall. Here, rather than the grouping of three arched entrances as at St. Anne's, there is a mirrored pair of doorways, recessed into the wall and framed by concentric brickwork. A tall, sculpted stone panel of St. Patrick simultaneously divides and unifies the entrances; rising elongatedly to meet two narrow

lancet windows above.[378] The stone panel is recessed into the facade, and framed by two vertical strips of finely detailed, articulated and chamfered brickwork. Though a more abstract composition than that of St. Anne's, the front facade of St. Patrick's hints more at the roof structure behind.

Longitudinally, the design sets up a strong rhythm across the nine bays of the nave and the sanctuary. Again, dormer windows are employed, but due to the level difference in the site, they appear higher within the overall composition. Articulated almost like vertebrae on a backbone, their presence dominates the side elevations through the lack of a transept. At St. Patrick's their form has been simplified to oblong panels of glazing, recessed and framed in rectangular brick dormers, headed with flashing in a stylized, simplified and subtle broken pediment motif. Structural bays generally frame groups of three short, rectangular 'lancets'; with each structural bay being defined externally as the space between articulated brick buttresses, cranked back to follow the angle of the roof and coming to rest at the base of the dormers.

The symmetry set up on the entrance front is disturbed by the stair enclosure for access to the gallery, here expressed as a rounded, bulbous, flat-roofed brick element on the north-west corner of the church, adjacent to the main entrance. With the simplification of form and the clear definition of units of space, the effect is of a semi-abstracted composition of simplified, well-defined forms, some almost platonic in feeling.

The brick-built presbytery at St. Patrick's again possesses something of the sweeping horizontal bias of St. Anne's. Though slightly plainer in form, it demonstrates a similar regard and pattern of emphasizing elements such as the main entrance door; again vertically demarcated – this time a brick pilaster with angled brick detailing rising up the centre, similar to that on the front façade; here disrupting and striking through the linearity of the broad eaves. Whilst the corresponding detail on St. Anne's presbytery takes influence from the round- headed detailing of the dormer windows on the church, so St. Patrick's makes a similar gesture of acknowledging the square heads of its dormers. It lacks the bow window of St. Anne's, and windows are simple rectangular casements without subdivisions.

Entrance to the church today is through the west door, approached via the pergola. As

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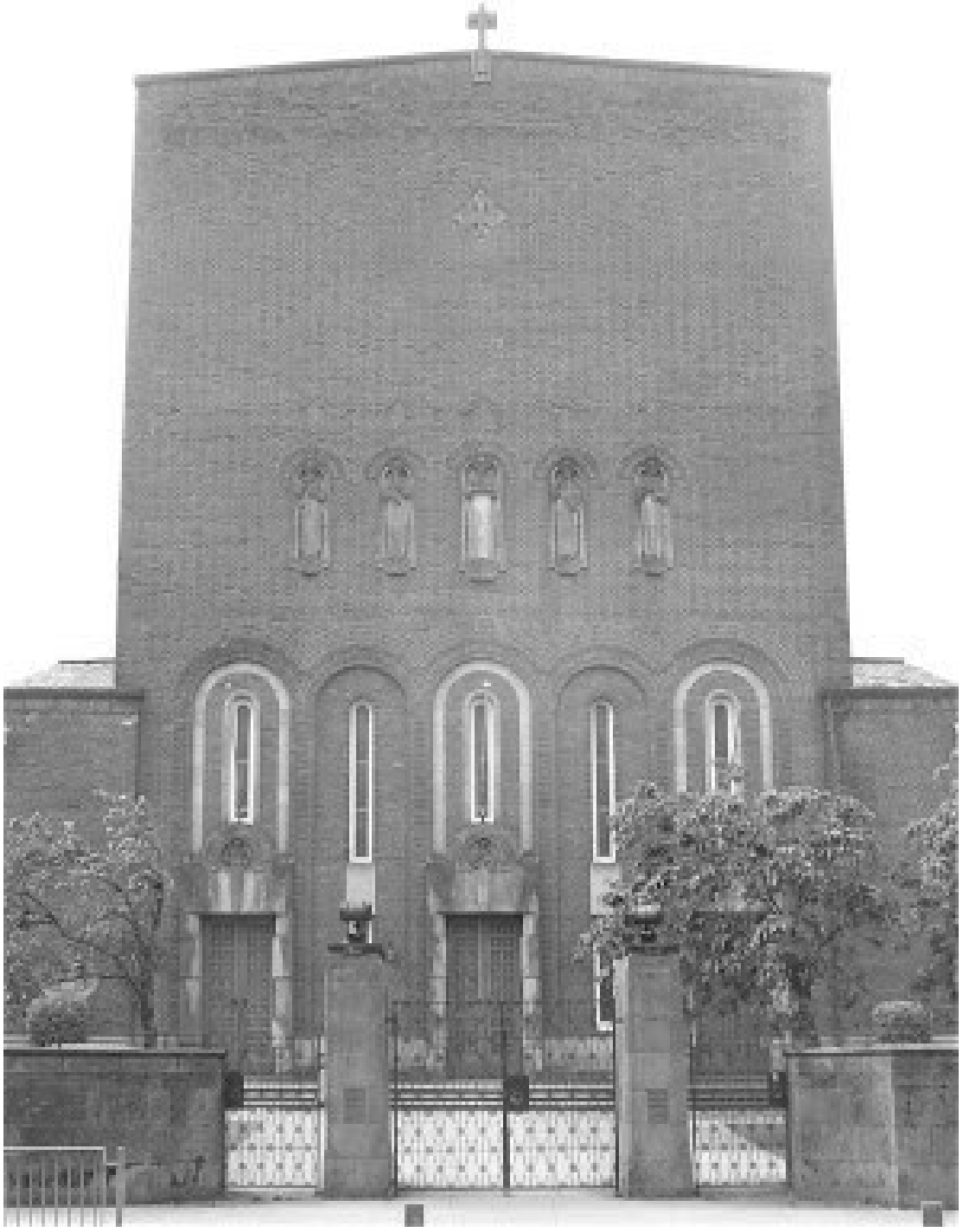
[378] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson., p. 20.

with the design of the firm's first church, the interior is expressed in brickwork up to the head of the piers,[379] but above these, plaster is the basis for the luminous, white-painted, single space of the nave. Unlike at St. Anne's, it is expressed according to the mansard profile of the roof, and the dormers here assume great importance. In addition to their modulation of space along the length of the nave, they are the primary means of naturally lighting both nave and sanctuary. At this church, the sanctuary end presents a squared-off, blind elevation to Holmscroft Street.

Just three steps demarcate the sanctuary from the nave; the post-Vatican II absence of altar rails permitting this minimal transition. Within the sanctuary, the travertine floor distinguishes itself from the timber and quarry tiles of the nave[380] and the altar and altar steps are richer still, in white and grey-green marble, and the baldacchino, with columnettes, round-headed arch and stylized 'stone' voussoirs is ornate against the white plaster background.

[379] Ibid., p. 20.
[380] Ibid., p. 21.

St. Columbkille's, Rutherglen 1934-40



St. Columbkille's RC Church, Main St., Rutherglen (1934-40), Gillespie, Kidd & Coia. Source: Eamonn Canniffe (2011).

St. Columbkille's continued an emerging tradition. Situated in the centre of Rutherglen, the church maintains a significant presence on Main Street. The site is, like the firm's earlier commissions, somewhat restricted, though not as diminutive or awkward as St. Patrick's. Its position on the site was determined by that of an earlier church, and

because of the need to address Main Street at the narrow end of its rectangular site, the substantial presbytery is, for the first time, placed behind the church's sanctuary end; connected by a corridor leading from the east side of the sanctuary.

This is a church which is as impressive by its scale as it is to the by now familiar aesthetic. Typically basilican in plan, St. Columbkille's reinstates the use of transepts, perhaps because the full length of the east elevation addresses Kirkwood Street; though they are in some ways disproportionately small in comparison to the bulk of the main volume of the church. At the front, a tall but shallow, plain, rectangular brick volume presents itself to Main Street; having a similar effect to a tower in announcing its presence from a distance. It has substantial parapets all round, increasing vertical accent and purity of form. This time, three separate round-arched doorways make up the principal entrance; their architraves crafted in pale-coloured, curved-profile carved stonework, in a similar manner to St. Columba's. Above, five round-headed windows herald a departure from that familiar central, narrow vertical feature; be it brickwork or glazed. The emphasis here, rather, is less dynamic but somehow more grounded. In its bulk, and with more emphasis on ceremonial presence within its locale, St. Columbkille's begins to bridge the practice's near total hibernation during the years of hardship caused by the Second World War.

On either side of the central vertical pavilion is a stair enclosure, giving access onto the gallery above the narthex. Rather than the curved forms of St. Patrick's, the Catholic Pavilion and St. Columba's, this element of St. Columbkille's has been translated into a simple orthogonal, square volume with broad-eaved, hipped roof. These volumes turn the corner to begin the massing of the side aisles with projecting confessionals.

The dominant side elevation to Kirkwood Street is constructed of facing brickwork and is underpinned by a logical arrangement of structural bays, which define the dimensions of the confessionals. There is, however, an irregularity of placement and number of confessionals on opposing long elevations. The east elevation to Kirkwood Street, from north to south, has, after turning the corner, one intercolumniated recess, followed by a pair of confessionals occupying one structural bay, followed by a three-bay recess with no intercolumniations, a further pair of confessionals, an entrance (also using one structural bay), then the east transept, which, again, represents a single bay.

The pattern of the west elevation to Greenhill Court is arranged in the following manner: intercolumniated recess, paired confessional, intercolumniated recess,

paired confessional, intercolumniated recess, paired confessional, entrance, transept. Owing to this rhythm, the lean-to roof projects uniformly along the elevation, whereas on the east elevation it follows the line of the projections and recesses accordingly. The transepts take on a similar language to the front tower; a parapet rising above roof level emphasizes their height. Otherwise, the west differs in its flat elevation from the east transept's semi-octagonal bay. Three tall, narrow round-arched windows rise the full height of the east transept; similar slit windows to those used on either side of the entrance tower.

The side chapel to the south of the west transept continues the peculiar asymmetry of the church. Lower than the west transept, it again features parapet walls and a concealed flat roof. Three evenly-spaced, vertical, oblong windows illuminate the interior from the west. Intriguingly, the projection of the side chapel is reconciled with the main body of the church in an elegant semicircular sweep; much like the semicircular features on both of Gillespie, Kidd & Coia's contributions to the Glasgow Empire Exhibition – the Roman Catholic Pavilion and the Palace of Industries North. It also reflects the symmetrically positioned stair towers on the front elevation of St. Columba's, and earlier, as the single asymmetrically placed stair tower at St. Patrick's.

The south end of the building is uncelebrated. Its blind, flat wall and hipped roof are remarkably domestic in feeling; perhaps because this is where the presbytery was (subsequently) built – rather awkwardly in some respects, as it appears to slide out from about half way along the south elevation of the church, making its presence from Main Street obvious, yet with the principal elevation of its angular 'U' form addressing Kirkwood Street. On all previous schemes, the presbytery was articulated to the right-hand side of the principal church entrance, towards the rear of the site, preceded by a garden; but here, the plot width was evidently restrictive.

The presbytery itself continues some of the established characteristics of Gillespie, Kidd & Coia presbyteries. At St. Columbkille's, there is an emphasis on asymmetrically placed components. An off-centre entrance pavilion projects forward of the principal plane with the entrance itself distinguished as an element resembling a small tower – a vertical punctuation mark at the north side of the pavilion, breaking through the cornice as a parapet wall and disrupting the uniformity of hipped roof. The entrance itself is arguably as detailed as the central vertical feature on the main entrance elevations of Gillespie, Kidd & Coia's 1930s churches. Though the majority of the house is otherwise finished in reddish brickwork, the entrance element has a familiar vertical thrust, with a series of

layered components acting together to form a large, detailed panel. The entrance, as stated by Rogerson, is surmounted by a carved stone panel depicting the Good Shepherd, in relief,[381] with a simple casement window above; its single mullion and transom aptly resembling a cross. The entranceway is flanked by three, equally-spaced, small square stone panels presenting biblical scenes; whilst above them, and continuing the rhythm of panel, space, panel, in equal dimensions, are a further four panels on either side of the central motif, referring to pre-Reformation administering figures of the Roman Catholic Church in Rutherglen.[382] A crowning stone panel elicits a tall, central, stylized keystone with diverging grooves and (the 'S') symbol of Christ; extending to the level of the parapet.

The entire ensemble is placed in front of a decorative base of very narrow projecting bands of brickwork, which in turn surmount the ordinary brickwork of the rest of the house. The house is plain yet imposing, with two storeys of accommodation and uniformly styled fenestration featuring tripartite casements and lights, with decorative muntins above and below the transom.

Internally, the church counters expectation. It is a long, broad, basilican space; flat ceilinged with expressed timber beams. The nave, contradictorily, terminates in a smooth, semi-circular sanctuary not hinted at from the austere, flat-walled exterior. Instead, there is an echo of the curved end of the side-chapel, only here it is not appreciated from the exterior. Lighting is from round-arched lancet windows in the side-aisles and clerestoreys, and from the transepts.

A corridor links the church to the presbytery in the south-east corner beyond the east transept and before the sanctuary.

[381] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson., p. 35.
[382] Ibid., pp.33-5.

St. Columba's, Woodside 1937

St. Columba's RC Church, Hopehill Rd., Glasgow (1937-8), Gillespie, Kidd & Coia. Source: Auhor (2007)

In 1937, Gillespie, Kidd & Coia designed the church dedicated to Saint Columba – the Irish saint sent to convert the Picts to Christianity, lies in an unprepossessing

area of Woodside, Glasgow, and has in common with many of Gillespie, Kidd & Coia's churches that it is conspicuous in its setting. Like St. Anne's and St. Patrick's, it is built on a relatively small, though orthogonally shaped site, though not so awkward as St. Patrick's. Although begun in 1937, St. Columba's was completed in 1941, despite the blitz over industrial parts of Glasgow such as Govan and Clydebank.[383]

St. Columba's continues certain design motifs established with the firm's preceding commissions in many ways, yet seems to represent something of a departure from this and an evolution, in others. In terms of site layout, the entire complex of church and presbytery again assumes the familiar arrangement, when viewed from the front, of church to the left-hand side with the presbytery attached to the sanctuary end and situated parallel to the rear boundary of the site. Like St. Anne's, a substantial front garden occupies the remainder of the site between the house and the road, and a smaller, private garden is afforded by the right-angled off-setting of the house.

The church is arranged around a single axis, orientated north-west / south-east, with no transepts, and nave and side-aisles expressed externally. Again, the steeply pitched roof, this time clad in red clay Roman tiles, is a mansard structure, not hinting at the structure within. The side-aisles are described as lean-to adjuncts to the dominant volume.

The principal elevation to Hopehill Road is striking – self-confident even, and whilst there are many familiar features – the tripartite entrance doors framed with stone architraves, and the central, vertical feature in a plain expanse of reddish- brown brickwork, no deference is paid to the construction of the main body of the church behind. Like St. Columbkille's, there is a complete visual detachment of principal elevation to main building, in height and in form. The boxy, oblong form overshoots the mansard roof behind, and is completed with a cornice and a low-pitched hipped roof, which is virtually invisible from the immediate vicinity of the church. A tall, narrow, slit-like cross-shaped window extends from just above the stonework of the middle entrance, with familiar brickwork lining its edges, like vertically stacked dentils similar to the detail used at St. Patrick's. A square stonework panel covers the intersection of the vertical and the horizontal arms of the cross. A small cross surmounts this on the parapet above. On either side of this, rising from the very top of the stonework of the two flanking entrances is a tall, narrow, recessed panel of brickwork, capped by a

[383] Plaque on St. Columba's Church

Romanesque trio of round-headed arches.

Like St. Patrick's, there is similar use of the flanking, rounded stair tower, only here there is one on either side of the front facade, rendering it symmetrical from the front. Unlike at St. Patrick's, they are finished with a low-pitched roof.

The long, leaded glass slit window motif continues on the sides of the oblong entrance element, again with the flanking vertical brick dentil detailing. On the semi-circular ends of the mirrored stair enclosures, further slit windows exist, except this time, on the west side, this centrally surmounts a trio of shorter slit windows, whereas on the east side there are three slit windows of equal height. Near the top of these elements is a stone stringcourse, above which is a horizontal line of dentil brickwork beneath the roof parapet.

Longitudinally, the structural bays are not as obvious as those of St. Patrick's; here they are delineated only by groupings of five narrow, round-headed clerestorey windows. Ten bays make up the nave, with a further bay at each end for the vertical, oblong narthex and the chancel respectively. The penultimate bay of the nave at the sanctuary end evolves from the steep lower pitch of the mansard into a shallower pitched catslide, on each side of the nave, which has the effect of integrating the lower, single-storey roof of the side-aisle structure, hipped on right- angles and broad-eaved, thereby creating an overhang. The side-aisle structure extends outwards at each end of the nave and again in the centre to accommodate confessionals. Their external expression takes on greater prominence due to the lack of transepts.

Apart from the nave roof's conspicuousness in massing and colouring, it takes on further sculptural qualities in the rows of triangular ventilation hoods on either side of the ridge. The chimneystack adjacent to the catslide roof at the south corner of the church, connected to the boiler room in the basement of the building, delineating the pivotal point between the church and the presbytery, is equally sculptural. The sanctuary terminates in a different way again to St. Anne's and St. Patrick's. Whilst the main body of the church ends bluntly at the south-west end, it is in fact terminated by a five-sided, blind-walled apse, topped with an equally five-sided roof with a convex curve towards the eaves and a convex curve towards their convergence with the wall of the main volume of the church.

Internally, the church represents a departure from the previous two. At St. Columba's, the

regulating dormers and largely hidden structure have been set aside in favour of a more structurally expressive model, whereby longitudinally thin but laterally wide structural concrete arched portal ribs define the nave – giving an impression of relative flatness when viewed from one end or the other – and assuming quite literally the qualities of an upturned boat. Smaller, one storey-high pointed arches define the side-aisles; their repetition down the length of the nave contributing to a heightened sense of perspective. A final pointed arch demarcates the end of the principal space and the transition into the apse, where the focus is conspicuously introspective due to the lack of natural illumination.

A gallery at the north-east end occupies the space above the narthex, within the tall, rectangular volume; the glazed cross aperture piercing the brickwork and providing intense, focused illumination in contrast to the apse at the opposite end of the building. The wall beneath the gallery is punctured by narrow pointed arched openings on either side of a principal wide, shallow-gauged arched opening. Surfaces are plastered and painted at the apse end, at the entrance end up to the gallery, and longitudinally up to the Stations of the Cross above the side-aisles. The main structural arches and their longitudinal bracing elements are also painted.

Essentially the church is constructed of a set of expressed, reinforced concrete portal frames infilled with brickwork and fenestration.[384] From the front, the presbytery evokes the appearance of a substantial villa, which is asymmetrical and adjoins the church at its southern corner. In a similar manner to the side-aisles, a broad-eaved hipped roof is employed, with a hipped gablet capping a large, rectangular bay to the left of the main entrance. Once again, an appropriate sobriety of design characterises the house, seemingly in deference to the church. It is interesting though, with elements echoed from the church. Less emphasis is now placed on the front entrance, the vertical feature piercing the eaves absent from this. This peculiar characteristic does return, however, on the house's south elevation, where a large chimneystack with central brick detailing highlights this punctuating and definitive acknowledgement of the site boundary. It steps in twice after breaking through the eaves and is terminated by three subtle bands of brickwork – a loose similarity to the fins of Thomas Tait's Tower of Empire at the 1938 Glasgow Empire Exhibition. The front entrance has a similar carved stone surround with round arched head and keystone, whereas the fenestration is composed of simple

[384] Blaikie, G.(2015) *St. Columba's Church Glasgow-architect Jack Coia.* Jack Coia, architect – early works. [Online] [Accessed on 2nd May 2015]
http://www.scotcities.com/coia/stcolumba.htm./

multiples of slim, delicate round headed windows. Apart from their opening top lights, they are similar to the fenestration used on the church, although clear glass rather than leaded is employed.

A curious mixture of brick craftsmanship quality abounds at St. Columba's; perhaps a result of the slightly ad hoc nature of the procurement of bricks, paid for at sixpence a piece, by the families of the parish; or indeed due to its completion during wartime.

Roman Catholic Pavilion, Glasgow Empire Exhibition 1938

Roman Catholic Pavilion, Glasgow Empire Exhibition (1938), Gillespie, Kidd & Coia Source: © RCAHMS SC461819 (1938).

In 1938, Gillespie, Kidd & Coia designed perhaps the most enigmatic of their

commissions. The Roman Catholic Pavilion for the Glasgow Empire Exhibition at Bellahouston Park; was an enduring presence, made even more so by its temporariness.

The exhibition was one in a lineage of national and international exhibitions to have taken place in Scotland since 1886. 'Empirex', as it became known colloquially, was set against a context of social, political and economic transition, within a country where the national mood had been damaged from decades of depression and the recent spectre of the First World War. That such a prestigious event should have been held in Glasgow was a function of its importance and standing as Britain's Second City, and it was also the fiftieth anniversary of its first international exhibition. Scotland as a nation had suffered badly in the depression following the First World War, and Glasgow as a city had succumbed to the decline of heavy industry and foreign market trade. Indeed the events that surrounded the events of 'Red Clydeside' attest to the appalling living and working conditions in the city.[385] Eventually, the British Government directed funding and public money into the city in a bid to regenerate its floundering economy and unemployment levels. Once Glasgow's redundant shipyards and engineering works began to operate again, a renewed sense of vigour and optimism followed, and the climax of this was the exhibition proposal in the mid-1930s.

The exhibition's objectives largely focused on technological and industrial development, tourism, education, and with the events of the First World War in the recent collective memory of the nation, and the impending threat of another World War, the promotion of peace within and from the British Empire. In a similarly harmonious gesture, the Lord Provost of Edinburgh endorsed the exhibition bid in an attempt to dispel the traditional rivalry between the two cities.

The design of the Empire Exhibition was masterminded by the architect Thomas Smith Tait, at the time working at the London firm of Sir John Burnet, Tait & Lorne. His appointment as Architect-in-Chief was strongly supported by his colleague and senior partner in the firm, Sir John Burnet – whose reputation earned him the very highest level of respect from the Scottish architectural community. One of Tait's jobs, apart from beginning to plan spatially and ideologically the various elements of the exhibition, was to appoint a team of architects to whom he could delegate the tasks of the design of the various palaces and pavilions. The team consisted of the cream of the contemporary

[385] Johnson, L. (2009) *Cultural capitals, revaluing the arts, remaking urban spaces.* London: Routledge., p. 90.

Scottish architectural élite, including T.W. Marwick, Margaret Brodie, Launcelot Ross, Esme Gordon, Gordon Tait, J. Taylor Thomson, A.D. Bryce, Basil Spence and Jack Coia.

Tait himself designed the central tower, nicknamed 'Tait's Tower', and the two largest plots, which housed the Palaces of Engineering and Industry were planned just to the south of this. Other buildings included those representing the Dominions and Colonies, national, cultural and industrial pavilions.

The limited timescale required an essentially simple and quick method of construction had to be developed, which in any case helped structurally with some of the large spaces required. This consisted of a welded steel framework clad with prefabricated concrete (asbestos) sheets. Moreover, this was a prime chance to sweep away some of the perceived notions of architectural propriety of past exhibitions, in favour of a system that consciously anticipated the future. This concept was embraced in differing degrees by the architectural team of designers, but none of them seemed to run with this more so than Jack Coia.

In a 1938 edition of *The Builder* – one of the few architectural journals to publish anything on Gillespie, Kidd & Coia during that early period, the Catholic Pavilion that Coia and his assistant, Thomas Warnett Kennedy, designed – was described as 'a remarkable essay in the romantic'.[386] The pavilion comprised three principal elements, only one of which was the actual church element; the altar-shrine, which was the only part of the structure to be roofed over and which was positioned at the opposite end to the entrance. The entrance was situated beneath a tower; itself recalling Tait's Tower at the top of the hill and was constructed as a vertical triangular tube with a tall, flat fin overreaching the top of the triangular element. A crucifix mounted to the top of the tower with an antenna-like pinnacle above, was the only adornment here. The idea of incorporating a tower, or campanile, was used at another of Coia's churches of the same year; St. Peter-in-Chains, Ardrossan – which it is said echoes Ragnar Ostberg's Town Hall in Stockholm. The plainness and simplicity of the tower volumes of both of these churches, and their relation to the other volumetric components of the buildings appears to re-surface, again, in some form in some of the later work of the firm, particularly the famed St. Bride's, East Kilbride (1963-4), although at a much increased overall scale. In between the entrance tower and the altar-shrine of the Roman Catholic Pavilion was the open-air oratory, or the main pavilion element, which was designed to sit at a lower level to both the church and tower elements.

[386] The Buider (1938) 'The Empire Exhibition, Glasgow.' *The Builder*, 20th May, p. 988.

The building was faced in smooth white stucco, recalling the functionalist experiments of the preceding decades; with a stone rubble base; with murals painted by Hugh Adam Crawford, Coia's friend and colleague from the Glasgow School of Art; depicting events and work of the Catholic Church. Whilst the building could be seen to acknowledge the international functionalist experiments of the 1920s and '30s, there are distinct ecclesiastical references also. In Corpus Christi, Aachen, the white external render and the deconstruction of the simplified masses of church and campanile bear some degree of analogy.

Its external mural decorations on their white geometric background also recall very strongly the external decoration scheme for Giuseppe Terragni's 1932 Casa del Fascio in Como – the local fascist headquarters. Marcello Nizzoli designed the external decorations of the casa, which consisted of a composition of enormous photographs, including one of Mussolini himself; in an attempt to educate the viewer politically. In 1936, the authorities ironically rejected a photomontage of the project on the grounds of ambiguity of function. Gillespie, Kidd & Coia's building, in a similar manner, advertised the Catholic Church, though apparently prompting fewer doubts.

It was at the Roman Catholic Pavilion that the firm first used some of the architectural details such as the raised roof above the altar, which would be used later as a device to admit a controlled amount of light in an acknowledgement of spirituality and the most sacred, and therefore most important area of the church.[387] There were no windows in the pavilion, with the sanctuary being lit indirectly from above. The modernist, smooth, white, geometrical forms of the pavilion also resurfaced at St. Paul's, Glenrothes (1956) and St. Mary's, Bo'ness (1962) in addition to the articulated apse form with light directed onto the altar. Along with the mural paintings, internal lighting focus suggested that the pavilion was both introspective and outward reaching.

Gillespie, Kidd & Coia's involvement in the exhibition was not limited to the Church's display of modernity. They were also commissioned to design the Palace of Industries North – evidently a much grander intervention into the overall scheme, as its name implies. This was a well-regarded design, epitomising Tait's architectural vision, lending itself more conspicuously to the paradigm of the 'Exhibition Style' - with its clad frame

[387] Watters, D. (1997) *Cardross Seminary Gillespie, Kidd & Coia and the architecture of postwar Catholicism.* Edinburgh: RCAHMS. p. 23.

system, Coia exuberantly displayed structure, juxtaposed architectonic elements on different planes, and played volumes of different geometries against each other. There are some similarities with the Roman Catholic Pavilion, only the Pavilion's superstructure is less obvious and some quasi-structural elements are apparently subverted to a more decorative role; particularly in the external iron elements, which have been likened to similar details of Charles Rennie Mackintosh. Colours throughout the exhibition were coordinated, in the manner of the 1915 San Francisco Exposition, and in contrast to the Roman Catholic Pavilion, Coia's Palace of Industries North was russet-coloured.

The Roman Catholic Pavilion was not a church per se, but as its name suggests, an advertisement for the Catholic Church in Scotland. It was also the only temporary building designed by the firm and no longer exists. It heralded a significant departure from the firm's previous churches, yet it is nevertheless suggestive of an evolving experimentation with abstractionist forms and of a preoccupation with the treatment and expression of different parts of the church in connection with different parts of the liturgy.

A preoccupation with simplified, abstracted geometry came at least as early as St. Patrick's, so its overt application at the Empire Exhibition, where the buildings were temporary, is not particularly surprising. The bow-fronted element, first used as a flat-topped, offset stair enclosure at St. Patrick's, and then as hipped-roofed symmetrical stair enclosures at St. Columba's, assumes central importance at the Catholic Pavilion, in both its singularity and in its function as the shrine element of the composition of entrance tower, exhibition space and 'church'.

The design of the Catholic Pavilion suggest that Coia had full rein to express his architectural ideas. The group of red-brick churches that he had designed in the eight or so years previously were notable and original in many ways, and were perhaps sometimes influenced by the involvement of the client, the Roman Catholic Church, and in particular the Archbishop of Glasgow. Indeed, in the positioning of the articulated geometric volumes, the monolithic quality of the building material (in these cases, brickwork), and in its picturesqueness and craftsmanship; are qualities which would begin to coalesce in the Catholic Pavilion and which would later be developed and purified in the practice's post-1956 work.

St. Peter in Chains, Ardrossan 1938

St. Peter-in-Chains, Ardrossan (1938), Gillespie, Kidd & Coia. Source: Author (2012)

Reverting to the broad grouping of brick-built churches, in the same year that the Roman Catholic Pavilion was built, St. Peter-in-Chains, Ardrossan, was formally opened by Archbishop Mackintosh on 2nd October 1938. Records and photographs of the opening ceremony demonstrate that it was carried out with all of the pomp and solemnity of a traditional Pontifical High Mass with the Archbishop presiding over the ritual from his throne. During the consecration ceremony, one of the priests in attendance, Fr. Frederick Pirrie, made emphatic connection with the new church, the first Roman Catholic church to be built in Ardrossan since the Reformation, both to the nearby ruins of the previous church on Castle Hill, and to Rome itself. In naming the new church St. Peter-in-Chains, he spoke of a bridge with tradition to the previous church, frequented by the fisher-folk of the village, who in turn would have known that their church was connected to Rome and to the basilica of the same name through St. Peter the fisherman.

Archbishop Mackintosh was congratulated on the opening of this, his 23rd church in the

Archdiocese to be opened since his return from Rome in 1922.[388] That Gillespie, Kidd & Coia were chosen to enact the commission of the first church in the town for around 350 years, dedicated to a saint explicitly connected to Rome is remarkable.[389] This was overseen by an archbishop who had spent a large part of his formative career there and was subsequently appointed by the Pope who launched the *Opera Romana.*

St. Peter-in-Chains stands abstractly in an elevated position within Ardrossan, overlooking the Firth of Clyde; the fifth church in the firm's inaugural sequence of the 1930s. It occupies a relatively generous and open site, in contrast to the previous churches, bounded by a railway line to the west, South Crescent to the south and beyond that, the shore of the Firth of Clyde. It is designed on a north-east to south-west axis, being entered from the south-west; a continuation of Arran Place, which follows the bend of the headland, linking to Princes Street and the town centre.

It is a substantial edifice, but particular gravitas is shown in the disposition of abstract, haunting volumes; plain and austere with expanses of empty brickwork, save for the almost childlike placing of doorway and window openings on the principal elevation. In this respect it represents a continuing evolution of the abstract brick volumes tested at St. Columba's, and played out unreservedly at the Roman Catholic Pavilion. Unlike the Pavilion, however, St. Peter-in-Chains is, like the firm's first three churches, executed in brickwork. Within the context of this study, acknowledgment must be made of the comparison that has been made with Ragnar Ostberg's Stockholm Town Hall, the familiarity of such has sometimes been credited to Coia's assistant, Thomas Warnett Kennedy.[390]

The building once again has a simple basilican plan form, with no transepts and a broad nave with narrow side-aisles. A gallery surveys the nave from the entrance end, but this time, the sanctuary end is an uncomplicated flat wall with an octagonal window above a simple cantilevered baldacchino. The interior space appears very broad as there are few supporting piers between nave and side-aisles; the latter becoming substantially part of the nave, save for the paired brick piers on either side of the building at each end. Brickwork is exposed internally to the level of the side-aisle roof; thereafter plastered and painted white. The ceiling vault is angled as if there were a mansard roof above it, yet in reality, it is nothing more than a simple pitched roof. This is the first time that such

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[388] Ibid.

[389] By virtue of his incarceration and subsequent miraculous liberation from the city

[390] Baxter, A. (1994) 'Early Coia buildings.' *Mac Journal*, 1, p. 18.

a disparity between interior and exterior forms has been displayed since the very first commission of St Anne's, where the external mansard roof was expressed internally as a barrel vault.

The interior is illuminated both by wide, rectangular, leaded windows, filling the bays between the vertical structure at the level of the side-aisles, yet above, the fenestration is not quite as it seems. Externally, high-level windows are expressed as clerestorey windows set, in a similar way to those in the side-aisle walls, within the structural bays. Inside, however, due to the angled vault of the ceiling springing from a point immediately below the level of the bottom of the windows, they appear as wide, rectangular, leaded dormers, separated by triangular infill elements.

The solid balustrade of the gallery is also plastered and painted, unifying the two halves of the church before the pipe organ, at the back of the gallery, above the narthex an within the entrance volume of the front elevation. A tripartite Gothic arched aperture frames the instrument, the only internal detail that is not abstracted, though the pointed arches are simply executed.

Even taking into consideration the relatively free rein given to Coia in the design of the Roman Catholic Pavilion, St. Peter-in-Chains is unusual – an odd tension of symmetrical and asymmetrical elements on the entrance elevation gives way to more conventional side and rear elevations. A stepping up from the west side-aisle starts by way of a low, broad-eaved hipped roof, abutting and slightly behind the central pavilion-like element. The central element is a tall, symmetrical, plain brick, rectangular box with a shallow gable – both in terms of its pitch and its volume - with parapet. Plainer still than St. Columba's, St. Patrick's and St. Anne's it still possesses a balance of openings and carefully placed economy of detail. Pointed arches characterise the central main entrance and flanking windows, but their inclusion seems almost mannerist, rather than part of an integral design philosophy. The double entrance doors are subdivided into twelve square panels per door, surmounted by a pointed arched panel, also subdivided into square panels which follow the curve of the arch, giving a perspective effect. A slim cross is placed centrally within the panel, and the entire doorway is demarcated by characteristic toothed brickwork up to the level of the top of the door and spring point of the arch, after which radiating slim brick voussoirs create a pointed arch over the doorway which is exaggerated and disproportionately deep at its apex. This gesture invokes an upward-thrusting dynamism, reinforced by a slim stonework keystone connecting to a familiar vertical brick detail up to the apex of the gable. Similar brick detailing to the doorway is

applied to the small flanking lancet windows. This is the extent of detailing relating to the central entrance pavilion.

In continuation from north-west to south-east, in retreat from the central pavilion is possibly the defining feature of the ensemble; a tall square-profile tower, reminiscent in its positioning to Mackintosh's tower at Queen's Cross Church in Glasgow, though taller and rather more abstract. Although the copper lantern on Coia's church has been likened to that feature of Stockholm Town Hall, it also seems to develop Mackintosh's slim, eccentric, hexagonal stone turret into the central crowning feature of St. Peter-in-Chains. The tower does not defer to its position at the entrance end of the church; its front elevation is completely blind. It does, however, address the south-east corner of the site, and the approach From South Crescent Road and Saltcoats. A similar entrance doorway with identical brick and stonework detailing is inserted into this secondary elevation, but this time with a tall lancet window taking the place of vertical brick detailing, connecting visually to the lantern.

The side elevations; north-west and south-east, are typically basilican in cross-section yet do not feature the pointed-arched apertures of the main elevation; the simple rectangular windows having more affinity with Schwarz's Corpus Christi, Aachen. However, they are not identical in their termination on the front elevation – whilst the north-west side-aisle terminates with a hipped roof, the south-east side-aisle does so with a simple mono-pitch roof and is set back from the front face of the tower. The sanctuary elevation is no longer visible, due to a large extension containing ancillary rooms to the rear, but below the level of the octagonal window.

Historically, no presbytery existed (though one had been planned from the beginning); the priests having lived in a house on South Crescent. However, plans for the construction of a presbytery were revived some twenty years later, and the house was built to compliment the church. It generally followed similar principles to presbyteries built at earlier churches, with a wide-eaved, low-pitched roof, but with the notable exception that this was built detached from the church.

Holy Family, Port Glasgow 1946-59

Holy Family, Greenock (1946-59), Gillespie, Kidd & Coia. Source: The Scotsman Publications Ltd 000-000-036-995 (no date)

Although not completed until 1959, Holy Family is a significant building from the practice's 'quiet' period of the 1940s. Begun in 1946, it represents a divergence from the majority of 1930s cluster, and appears to set the scene for many of the firm's 1950s offerings. In essence, Holy Family both continues the pattern of long plan-type churches established in the entire 1930s cluster; only here, the economical outline and spareness of detail and materials, seems to amplify those same concerns of the earlier cluster – particularly in the austere monolithic brick surfaces. But what really comes to the fore is the preoccupation with the campanile, first seen at the Roman Catholic Pavilion and at St. Peter-in- Chains, but not used at St. Anne's, St. Patrick's, St. Columba's, or St. Columbkille's. Furthermore, the undeniably deconstructed nature of the Roman Catholic Pavilion, with *separate* campanile, now emerges as a fully-fledged motif at Holy Family, though here it, as the entire ensemble, is executed in brown brickwork rather than white-painted render.

Holy Family is situated within the new parish of Port Glasgow, within the Diocese of Paisley, created alongside new post-war housing to the east of Port Glasgow. It is orientated with the entrance at the west end and the sanctuary at the east, with the

entire ensemble of elements on an elevated site, overlooking the River Clyde to the north. It is conspicuous in building size, generosity of site, and in contrast to the band of green space that envelopes it. Access is by way of an inclined driveway from Parkhill Avenue, and this leads to a distinct complex or ensemble of built elements rather than merely to a church, consisting of church, articulated campanile and presbytery, separate church hall and later extension housing a side chapel. The composition and the space that connects it, whilst not as formal, has the feel of a piazza in the manner of St. Brides's, East Kilbride.

The vast, plain brick campanile commands the north-western corner of the complex. It is virtually blind and devoid of relief from its monolithic bulk, except that it is actually quite carefully conceived as a squared, elongated 'arch', with two massive, load-bearing walls on the east and west sides, and a connecting flat roof. The north and south walls, slightly recessed, are treated as infilled elements, and do not meet the roof, instead stopping short to form a square opening about as tall as the width of the open space between the loadbearing walls, creating an unobstructed void for the ringing of the carillon. The composition is strikingly pure and quite abstract, and its role as prototype for the articulated campanile of St. Michael's (1952-54) and St. Joachim's (1956), is particularly striking. It is the feeling of separateness of the various ecclesiastical elements that here is so remarkable, and something that was not truly seen again until the construction of St. Charles, Kelvinside, which followed the completion of Holy Family in 1959. Yet in reality, their apparent separation is really *articulation*; the campanile being joined to the main church in its lower portion – a glazed 'bridge' connecting it lightly and almost transparently, to the west end of the church. A similar device joins the presbytery to the north wall of the church, at the seventh structural bay (of nine). The presbytery echoes the rectangular form of the church, and its offsetting to the north-east allows greater impact, whether travelling east or west along Parkhill Avenue.

The dominant aesthetic of the church is of a restrained and rational clarity; a large oblong box constructed of concrete portal frames, infilled with brick, with shallowly- pitched, green copper-clad roofs. The coupling of this with the articulated campanile and presbytery evokes a machine-like kinesthesis of sliding components, and suggests a flexibility of composition and a potential for development or formal evolution, previously absent, *with the exception* of the Roman Catholic Pavilion and potentially St. Peter-in-Chains. This aesthetic is reinforced by the placing of areas of glazing such that they accentuate the frame structure of the building, sometimes inhabiting the full width of a structural bay, which occurs in bays one and nine (the first and the last) on the north side

of the church. High level, horizontal clerestorey glazing punctuates both long elevations; north and south. Again, it occupies the entire width of the structural bays, in three sub-divided panels, and emphasises that the brickwork between the structural frame is only infill; creating a narrow void between the top of this and the eaves. Notable here is not merely the use of creative structure, but structure beginning here to be expressed externally *as well* as internally. Indeed, each structural frame is expressed externally, which on the dominant north side, suggest a light touch with the hillside on which they rest.

They also create a delicate illusion of levitation from the inclined ground surface, as the lowest level is recessed back from the frames, with the resulting cast shadow just above the ground further adding to the illusion. At the lowest level, the frames are expressed as fair-faced concrete rather than over-clad in slightly projecting brickwork as they are above, as if to further emphasise the effect of the main bulk of the church hovering a storey above the prinicipal level.

The modularity of the building and its dynamic horizontal uplift is highlighted further still by the projection of the confessionals in a horizontal oblong extrusion, one storey above ground level on the north side. The box-like structure stretches the length of three structural bays (bays three, four and five), but actually cantilevers beyond them and hence beyond the main north face of the building. The projection is sheathed in vertically-orientated narrow-banded cladding, with narrow, vertically-orientated fenestration – each asymmetrically divided in two by a wide horizontal transom about a quarter of the height of each window.

Passing the glazed ‘bridge’ that connects to the presbytery, the last structural bay (of both the north and south facades) features an infill panel recessed from the plane of the neighbouring infill panels, in a gesture that would characterise many of the firm’s 1950s churches. The setting back of this final bay within the sequence demarcates the sanctuary, and the recessed glazing within it. It is largely unnoticeable until proximity to the sanctuary permits, providing elusive and indirect luminosity to the sanctuary and especially to the altar. This panel is composed of a brick infill wall approximately to the level of the tabernacle within the sanctuary. Above that and up to the level of the eaves, and spanning the full width of the structural bay, is a richly-glazed panel, divided unequally into three horizontal sub-panels; the deepest of which is in the middle. Each horizontal delineation features a deep timber transom, with much narrower timber mullions arranged in random spacings between, thereby dividing the overall panel into

sub-panels of glazing of different widths, the narrowest of which are filled with red, blue or yellow coloured glass, reminiscent of a Mondrian painting.

The east (gable) wall is completely blind – the focus here becoming purely utilitarian, with only a chimney stack for relief.

The south side repeats the device used to engender a sense of spirituality – that indentation of the bay closest to the sanctuary; thereafter, the bays follow the material pattern of the north side, in their brick infill and horizontal clerestorey glazing. This time, however, the bay closest to the west (entrance) end is identical to the others rather than being extensively glazed like its counterpart on the north façade. A large portion of the south side, however, was altered in the 1970s, when a long, low, oblong extension was added; to provide a substantial side-chapel, and with the added benefit of improving heat loss from the main body of the church. The side-chapel and lobby element begins part way along the south side, on the structural bay adjoining the sanctuary bay, and extends westwards beyond the front wall of the church, effectively sliding past the main church and coming to rest in alignment with, and just before, the church hall. The main entrance is reached by way of a flight of steps leading to a raised terrace, and the whole entrance area is given a degree of enclosure by virtue of the side-chapel extension that overshoots the principal entrance façade. The entrance itself is described by double timber and glass doors at the mid-point of the façade. Above the doors, and stretching the width of the elevation between the glazed link that connects to the campanile, and connecting to a similar feature on the side-chapel extension, is a horizontal band of glazing; again, seemingly arbitrarily vertically subdivided, and periodically fitted with small panels of coloured glass.

Internally, a familiar configuration ensues; entrance into the church is by way of a narthex, this time with a glazed screen separating it from the nave. The language of the screen here is similar to other areas of glazing; deep timber horizontal elements and narrower vertical mullions. Here though, there is no irregularity of subdivision within the screen as a whole, as exists on the concealed glazing on either side of the sanctuary.

Entering the main liturgical space of the nave, a great oblong, regularly shaped space opens out, the whole being regulated and sub-divided with a reinforced, white-painted concrete frame structure with infill panels between. On the north side, access to the confessionals accords with the projecting external element, and appears as a narrowly laid vertically set timber screen, with doors to the confessionals given the

same treatment, so that they appear to be seamless in context with the screen, save for their glazed panels and spherical metal doorknobs.

On the opposite side of the nave, a glazed screen separates the nave from the side-chapel. It has the same design as the glazed screen that separates the nave from the narthex.

Above, a preoccupation with structure emerges again, with the reinforced concrete frame taking on the feel of an abstracted, folded concrete rib vault. Yet none of the members actually meet – instead, a subtle change of angle occurs, such that on their uppermost surface they follow the shallow pitch of the roof, whilst their underside adopts an even shallower angle; the beams becoming deepest in the middle (at the ridge of the roof). This illusion occurs in no small part to the shadows cast by the subtle playfulness of the structure in natural light from the clerestorey glazing on the white-painted ceiling. It is a device, which would develop into a more strongly folded concrete ceiling at St. Charles Borromeo.

The sanctuary at Holy Family is not demarcated by any change in roof level; in fact, the roof structure and level continue in uniform design and height. However, it is described by the illusion of an exaggerated narrowing of its width – an aesthetic produced by the placing of a floor to ceiling brick wall perpendicular to the nave, on either side of the sanctuary. This has the effect of both accentuating focus on the altar, and of concealing the sources of light from the windows lateral to the sanctuary.

St. Joseph's, Greenock 1947-53

St. Joseph's, Greenock (1947-50), Gillespie, Kidd & Coia. Source: St. Joseph's (no date) https://stjosephsgreenock.com/st-josephs-today.

St. Joseph's (1947-53 was begun just a year after Holy Family and was conceived in a similar vein. Again, a large church forming an ensemble with its presbytery and separate hall, the church occupies a large, open green site in an area of low-rise, low-density housing in Greenock. Orientated with the entrance at the south-east end and sanctuary to the north-west, the building is executed as a grouping of interconnected abstract volumes clad in brownish brickwork. Like Holy Family, it features a campanile, but one that is not so large or prominent, instead being recessed into the south-east corner of the principal elevation, in a very similar manner to St. Peter-in-Chains. The main body of the church to which it is attached is a simple, shallowly pitched oblong volume, with expression granted to the sanctuary by way of a narrower projecting element at the north-west end. Peripheral liturgical elements are arranged around the main volume and are expressed additively as low, flat-roofed projections interacting with elevations on both long sides of the nave and also behind the sanctuary wall.

Fenestration is spare, particularly on the main façade, in the manner of St. Peter- in-Chains, and the external rear sanctuary wall, which is completely devoid of fenestration, with a small amount of illumination instead being provided from small high-level windows

on the short return walls of the sanctuary projection. On the lateral walls, simple oblong apertures modulate the largely unadorned exterior, suggestive of the structural modulation within.

Internally, the structure of the columns is visible and is turned through 45 degrees such that they form rhomboids. Again, such playfulness of structural expression would culminate in at St. Charles's, a decade later.

St. Matthew's, Bishopbriggs 1950

St. Matthew's, Bishopbriggs (1950), Gillespie, Kidd & Coia. Source: Author (2012).

Essentially, the main body of St. Matthew's is a simple, pitched oblong box with a much smaller, pitched oblong box at the front, and a series of flat-roofed accretions housing ancillary spaces, on the periphery. The entire church is built of reddish-brown brick with economical pale concrete detailing.

The principal, gabled elevation of the building faces Kirkintilloch Road, which is elevated as it passes the church, rendering the roof of the building visually dominant. Although it is the principal elevation, it belongs to the smaller volume at the western end of the main body of the church, and is therefore extremely subtle in presence. A single tall, narrow,

rectangular lancet is the only focus save for three stone blocks delineating the spring-point of the gable on each side, and its apex. Instead, the entrance is recessed from the most westerly plane of the building, and heralded by glimpses of two concrete panels in high-relief; references, as one might expect, to the life of St. Matthew.[391] These, along with a flat-roofed canopy, supported on slim, circular steel posts, and partially infilling the space created by the adhesion of the smaller volume to the larger; create a focus on a building otherwise shy of significant architectural detail. Double timber doors stand at the threshold to the church, upward-pointing chevrons being created when they are closed.

The main volume is composed of eleven bays with tall, narrow windows, subdivided into sets of five smaller rectangles mirrored about a central vertical muntin. On the south side, a side-aisle projects from the seventh bay along, curiously expressed as an additive flat-roofed element. The beauty of St. Matthew's lies in its volumetric reductivism and expressive hierarchy of space, various sized spatial volumes and pitched and flat roofs differentiating the principal liturgical spaces from the ancillary. The smaller of the two principal spatial components is the baptistery – which one enters by way of the main entrance. An ancillary room and WCs lie to the north of the baptistery, whilst, turning eastwards, the main axis and larger volume of the nave becomes evident. At the west end of the largely single-space nave, four confessionals (two on either side of the entrance into the nave) are designed as if to demarcate a transition between entrance and sanctuary, rather than their usual position in Gillespie, Kidd & Coia churches; longitudinally along the nave or side-aisles. The rhomboidal glazing in the confessional doors would later be experimented with on a larger scale in the nave windows at St. Michael's, Dumbarton.[392]

The nave is distinctly meditative; introverted even, and very light – it does not possess the wide space of many of its forbears or many subsequent churches, and there is an absence of side-aisles apart from the four-bay long, and somewhat incongruous side-aisle on the south side of the east end of the nave. The cuboidal space is also simply and directly focused on the sanctuary; the low, flat ceiling intensifying this dominant axial characteristic.

The sanctuary itself is defined only by being very slightly inset from the main body of the

[391] The presbytery is to the north of the church, beyond the library, and on the corner of South Crosshill Road.
[392] See also the confessional doors at Sacro Cuore di Gesu Agonizzante, Zona Mezzocamino, Rome, 1952-54

nave, and by a dais of three white marble steps, surmounted by an altar. Above, the ceiling level and treatment does not change, but although the baldacchino is compactly flattened to the ceiling, its chamfered timber profile acts as an effective liturgical marker within the sanctuary.

On the north side of the nave, before the sanctuary and opposite the side-aisle, a large window subdivided into 35 smaller oblong panes almost fills a structural bay and is pushed almost imperceptibly outwards; a remarkably subtle gesture suggestive of a vestigial transept, and in anticipation of the large glazed screens subdivided with steel muntins, at St. Michael's, Dumbarton.

Behind the sanctuary, two sacristies, a further WC and a back hallway with access to the exterior, complete the compliment of servant spaces. It is again notable that the sanctuary space, save for the gable extending above the level of the flat-roofed ancillary zone, lacks significant external expression, as at St. Columbkille's, and to a lesser degree, St. Peter-in-Chains.

Despite its plainness and eschewing of significant and costly details, there exists a clarity and legibility at St Matthew's that can be directly attributed to its pleasing simplicity of articulated functions.

St. David's, Plains 1950

Elsewhere, and although no longer standing, St. David's, Plains (1950) is an intriguing piece of the jigsaw. Designed in the same mode as St. Matthew's and others of the early 1950s, it is maximised spatially by the placing of an asymmetrical row of structure to distinguish the nave from the single side-aisle. This occurred to a less obvious degree at St. Michael's (1952-4), and would appear again in the sublime asymmetrical timber post and beam structure a decade later at St. Mary of the Angels, Camelon (1960-1).

St. Eunan, Clydebank 1950

St. Eunan's, Clydebank (1950), Gillespie, Kidd & Coia (author)

St. Eunan's, Clydebank (1950) is a similar model to St. Matthew's, Bishopbriggs, although slightly larger. It commands a dominant position but this time within an expansive estate of housing in Clydebank. It is again expressed volumetrically as a pitched rectangular block housing the main liturgical space of nave and sanctuary, with the entrance lobby in a smaller attached, pitched block to the western end of the church; and ancillary spaces including side-aisles and transept-like projections housed under flat-roofed aggregations around the periphery.

Occupying an open position on at the junction of Gilmour Street and Kirkoswald Drive, the dominant elevation is the long south side (facing onto Kirkoswald Drive), even though the 'front' elevation is the west wall of the smaller entrance volume facing onto Gilmour Street. Once more, the main west elevation is blind except for a tall, narrow, rectangular slit window, positioned centrally under the ridgeline of the pitched roof.

There is something of an oddity in the church's pared down and heavily abstracted basilican form of nave and side-aisles. Not only do the side-aisles have flat roofs, contributing to a certain visual detachment, but also the portion of the nave that is elevated above the side-aisle roofs looks like it should be a clerestorey, but does not behave like one, given its complete lack of high-level glazing on any elevation.

St. Kevin's, Bargeddie 1950

Following in the series of simplified, basilican-plan early 1950s churches, St. Kevin's, Bargeddie (1950) largely follows a similar pattern of long, narrow liturgical space with pitched roof, subtle definition of the sanctuary through slight recesses on both of the long sides of the nave, and smaller entrance volume also with a pitched roof. The church, this time is on a north-east, south-west axis (with the altar end facing south-west) and is set in a large plot within a semi-rural location east of the Glasgow conurbation. Consequently, the preferred design configuration of church occupying the left-hand side of the site, with attached presbytery at the back, and garden in the space in the middle and along the front boundary, returns. However, the original church, though still discernible, has been altered in recent years by James F. Stephen Architects.

St. Andrew's, Airdrie (1953) follows the general pattern of geometric basilican churches of the preceding years of the decade, however, it's concerns focus more intently on structural expression. The church is primarily a shed-type building formed by a series of angled concrete portal frames, developing such preoccupations exhibited at Holy Family and St. Joseph's, and further anticipating St. Charles Borromeo.

The front façade of St. Andrew's is simply an infill to the structural frame expressed around its edges. Fenestration here takes the form of clerestorey glazing on either side of a central spandrel, with tall, narrow, more domestic-type windows with opening lights below. Elsewhere, very little fenestration exists on the painted, rendered walls, which, apart from the front face, conceal the structure within.

Peripeheral elements are again expressed as semi-independent but attached, low flat-roofed volumes, including the entrance to the church, and the sanctuary is demarcated by a projecting volume similar to that at St. Joseph's.

St. Laurence', Greenock 1951-4

St. Laurence's, Greenock (1951-4), Gillespie, Kidd & Coia. Source: Author (2009)

Following the Clyde and approaching the centre of Greenock from the A8, St. Laurence's (1951-54) sits in a conspicuously elevated yet insalubrious position to the south, overlooking the river. Another basilican example, St. Laurence's, really does buck the trend of the phase of early '50s churches, which although interesting, are austere by comparison. The War Damage Commission allowed for the re-building of the former St. Laurence's church, which had suffered bomb damage during the raids on Clydeside in the early 1940s.

The church appears fortress-like and it is imposible to ignore Coia's own description of it as 'a nice essay in modern Gothic', in correspondence from 1949 with the parish priest, Rev. John Daniel.[393] This becomes clear in its massing and silhouette on that small site at the intersection of Kilmalcolm Road and Ingleston street, and the steeply-sloping pitches of its roofs increasing the sense of elevation begun by its topography. Volumetrically it is something of a hybrid; both referring to recent

[393] Coia, J. (1949) *Letter to Rev. John Daniel*.19th April. REF. JAC/JTB. Source: GSA Archives.

patterns of simply pitched oblong spaces with flat-roofed peripheral areas, whilst at the same time employing the use of steeply- pitched lean-to roofs over side-aisles and confessionals. St. Laurence's also revives the earlier configuration of church and attached presbytery. The resultant garden space achieved by the right-angled connection of the two buildings has however, here been sacrificed into nothing more than a pathway bordered by a narrow strip of lawn on either side, owing to the irregularly shaped plot.

Orientationally, the church follows a more or less west-east axis with the main entrance front westernmost and the sanctuary at the east end. The presbytery lies to the south, whilst the ground falls away to the north towards the Clyde. Though the entrance front is utterly captivating in its creativity, it is at the sanctuary end where the architectural emphasis lies, and where the focus on the liturgy is truly celebrated. Working then from west to east, an aesthetic unravels which is both a departure from and a development of, the clusters of Gillespie, Kidd & Coia designs of both the '30s and early '50s. However, St. Laurence's would have been designed only a year later than St. David's, St. Eunan's, St. Matthew's and St. Kevin's, and almost completely contemporaneously with St. Michael's. Gone is the preoccupation with the tall, rectangular entrance slab, and in its place is a façade, which forms only a small parapet above the roof of the main liturgical space. Instead, what we see is effectively the gable end, with the steep pitch forming a simple but significant triangular top. The end walls of the side-aisles contribute to the composition of this elevation, appearing almost as buttresses to the central portion of the façade. The triangular motif, with obvious reference to the Holy Trinity is emboldened by the central feature of the west façade, the entrance, which is a kind of simplified and weighty portico, bearing down on the twin entrance apertures. The use of russet-coloured brickwork is by now a familiar feature of the firm's ecclesiastical output, and St. Laurence's employs it unreservedly; its plainness and massing relieved by an exquisite deliberation of precisely executed apertures and details. Pale stone details frame the brickwork, emerging as cornerstones to the triangular elements, and on the projecting triangular pediment that forms the entrance elevation, we again see the familiar vertical brick feature with dentil details. Above the division between the two entrances, two rectangular lancets provide a mirror line, which continues up through the rest of the elevation. Above the two lancet apertures is the brick detailing, and then above that is a small circular aperture. On the triangular plane behind is another circular aperture, which occupies the space between the two apexes. The top is crowned by a detailed keystone and metal cross.

The south elevation is more recognisably ecclesiastical, with side-aisle and confessionals expressed as part of the overall outline of the building rather than as flat-roofed accretions, as at a St. Michael's and several other of the early '50s cluster. However, the side-chapel at the western end is expressed as a flat-roofed, top-lit structure. Apertures vary between square or rectangular with thin stone or concrete framing; but probably most striking are the clerestorey windows where Coia's interest in stylizing the form of the fenestration develops again, so we see a row of triangular apertures with a leaded cross in the middle, and slightly convex sides.

As mentioned, really the sanctuary end is the key feature of this church. It rears up – a great, gabled, inhabited column of brick – in a way like a Scottish crow-stepped church tower, but in place of the stepped gable, simply a parapet with a gable in between in its two dominant elevations. It is essentially two diaphragm walls, infilled in between. This is a tower, which rises above the level of the principal liturgical space, with a simple gabled roof, and on each side, two clusters of three – one surmounted on top of the other – curved-sided triangular windows that were first noted as the clerestorey glazing on the south facade. Again, in a similar way to the front façade, the easternmost end of the church projects beyond the end of the sanctuary tower, again in a triangular portico. Again, there is a round window forming the east end of the tower above the portico, which is again surmounted by a cross and similar pale stone features at the corners. But the real interest here is the way that the outermost portico is actually pulled away from the wall of the sanctuary tower and this becomes more apparent and more magnificent from the interior.

The north side employs a similar vocabulary to the south side, with a side-aisle projection with a lean-to roof. However, at the north-eastern corner, which is also the pivotal point at the junction between the church and attached presbytery, we see the re-emergence of the flat roof. This time it takes on something of the quality of a fortress or castellation, as it rises up to the level of the spring point of the main roof, and continues the stylized, convex windows around the otherwise plain elevations of this lower tower – actually a stair tower. Here, another distinct group of apertures appear – this time a recurrence of the diamond-form window seen contemporaneously at St. Michael's.

Inside, the real majesty and beauty of the church becomes apparent. Like a giant upturned boat and in this church we see a further development of those concrete rib-like structures, first used at St. Columba's in 1937. Here, each bay is defined by them – these very slender, curved, concrete arches – wider transversally than they are along

their longitudinal axis. They also form an integral structural device with the side-aisles, through which narrow, slim, tall, highly-pointed arches are punched through the concrete, so that the whole structural ensemble is integrated transversally across the church. This has the effect of creating intensely focused perspective down each side-aisle, terminating in a side-aisle on either side of the sanctuary, in addition to the nave, terminating at the sanctuary. The main liturgical space is such that the arched ribs do not actually appear to join at the top. At about two thirds of the way up, they are homogenized into a continuous (though still curved) surface, that runs the length of the liturgical space. The view from entering the church is therefore focused on the sanctuary, but before this is the tower, the round window of which, from the west end of the nave, aligns directly with the top of the arched vault of the nave. A further stylized arch marks the transition from the tower to the sanctuary proper, and the thing that links the two spaces is a very simplified suspended, thin, flat, gable-like canopy – a baldacchino in effect – which acts as a visual transition between tower and sanctuary. Before the end of the sanctuary wall, as explained previously, the effect is that the easternmost point of the building – the sanctuary wall – is actually pulled away from the tower. The device that allows this to happen is a band of glass blocks – transparent in all but the cement matrix that suspends them in-situ - that follow the gabled profile of the sanctuary end wall. The striking point here has to do with the articulation of individual elements.

Looking back down the nave from the sanctuary, an abstract perspective occurs, again with the arched vault seeming to run away back towards the west end. Visually, the gallery links the two convex halves of the building, above which are the two circular windows, which form a kind of punctuation point at the end of the building, with the uppermost aperture being larger than the bottom.

The side-chapels themselves are very interesting because these are top-lit, and consist of a trio of porthole apertures in the roof, thereby admitting a diffuse light from above rather than from the side. This was presumably to intensify the experience of the worshipper, and to focus one’s attention on devotion. A similarity exists in a side-chapel at Coventry Cathedral.

St. Michael's, Dumbarton 1952-4

St. Michael's, Dumbarton (1952-4), Gillespie, Kidd & Coia. Source: Author (2009).

St. Michael's, Dumbarton (1952-54) begins to break the 'formula' of the early 1950s church cluster, including St. Matthew's, St. Eunan's, St. Kevin's and St. David's; yet it develops certain similar characteristics, but on a larger scale. In this respect, the anomaly of St. Laurence's raises a question of sequence, as did the Roman Catholic Pavilion fourteen years earlier. St. Michael's also links typologically with St. Joseph's, built seven years later in 1959, and after the key year of 1956 – the design and construction of St. Paul's, Glenrothes.

St. Michael's was one of the first (after St. Laurence's) of the practice's substantial new churches to be built following the end of the Second World War. Refining the basilican-type plan with attached campanile, this church is generally more experimental, architecturally. Apart from being considerably larger than its forbears from the early '50s, St. Michael's is an altogether richer building, with a distinct, sometimes playful – certainly inquisitive – use of glazing, be it in the large yet decorative areas of infill glazing, or in the punched rhomboidal apertures of the nave.

Topographically, the church lies on a prominent sloping site above Cardross Road, with the dominant south elevation addressing the road; its mass all the more imposing because of this. Constructionally, the church consists of a steel frame, clad in reddish-brown brickwork, originally covered with a corrugated asbestos roof, due to post-war material shortages.[394] Volumetrically, the building is again a simple pitched oblong with side-aisle, confessionals and ancillary rooms expressed additively with flat roofs, thereby giving prominence to the main liturgical space of nave and sanctuary. It is the campanile, however, that takes extreme architectonic prominence. This can be understood due to its positioning at the south-west corner closest to the road, its relative height to the main building, its vitrine-like glazing displaying an enormous crucifix with adjacent statuary, and its very considered articulation with the main part of the church through a flat- roofed connection significantly below the eaves level of the principal pitched volume.

The west elevation is the principal elevation in this case, and can be divided into three bays, with the former baptistery expressed externally as the northernmost and central bays, as two large steel-framed windows subdivided into fifteen smaller square sections. This suggests a development of the glazing at St. Matthew's, and its craftsmanship is intensified by the small superimposed steel cross motifs at the crossing of the horizontal glazing bars with the vertical muntins. Above, a large central, steel-framed window, sub-divided into nine unequal sections, illuminates and gives presence to what would have been the double-height baptistery. Surmounting this and overshooting the apex, a metal cross crowns the elevation centrally, supported on a rod attached to the brick façade with the alpha and omega symbols adjacent and the IHS christogram at the base. The third bay is occupied by the entrance doors, which, unlike the early '50s cluster of churches, although recessed from the front elevation, is on direct axis with the nave and sanctuary. The entrance level is placed on an elevated platform, which meets the slope of the ground with a substantial flight of steps. The raised platform reaches a height of almost one storey as it extends past the campanile to its southernmost point. The campanile is recessed back from the plane of the west façade and a slim, flat-topped concrete canopy seems to surge out from the main façade, southwards, enveloping the entrance and coming to rest at the southern edge of the campanile. Three white-painted round concrete columns provide support along the periphery, turning into square-section piers as the canopy becomes engulfed by the west façade. Once again, the use of a flat concrete canopy to define the entrance is a

[394] The original asbestos roof was replaced in the early 1960s with a corrugated copper roof; subsequently replaced following storm damage in 1998. See Saint Michael's, Dumbarton. (2004) *Church Golden Jubilee 2004* [Leaflet] Glasgow: Garthland Design & Print.

logical augmentation of the small canopy-marker of St. Matthew's.

Despite several large areas of glazing, there is still an overwhelming proportion of undecorated reddish-brown brickwork, perhaps most evident on the west side of the campanile, where the only relieving feature is the vertical high-level ventilation grille, the top of which echoes its shallowly-pitched roof. But on the southern, more public side, everything changes as the campanile reveals itself to be two vertical book-end slabs, now unfortunately infilled at ground level, but above, sumptuously glazed from wall to wall and to a height of three storeys. This steel-framed vitrine is a functional expansion of the baptistery windows, but this time with subdivision into 84 square sections with the same superimposed cross detail at the juncture of the horizontal and vertical elements. A brick infill section occupies the uppermost portion of the campanile, perforated with a grid of square apertures for the dispersion of the sound of the bells within. A thin concrete slab divides the glazing from the brickwork above, and shallowly projects from the plane of their recess to the outermost plane of the side walls. It is surely the richness and craftsmanship of the campanile that underpins the character of this church.

The external entrance podium wraps around the campanile – a slim concrete slab supported and abutted by a brick retaining wall. Another flight of steps rises to a secondary entrance behind the campanile, on the visually dominant south front. There is again a lavishly glazed steel-framed panel of square sub-divisions featuring the cross motif, a 'shop window' onto the liturgy, in effect. Further along the south façade, there is an overwhelming sense of functionality, and a strong sense of deliberation and propriety in the placement and form of the fenestration in the otherwise unornamented brick façade. Small rectangular paired apertures are a legible indication of the confessionals, housed with a sense of privacy within an exceedingly shallowly-pitched body adjacent to the nave. The side-chapel beyond is demarcated by further projection to the confessionals, and by a row of square windows – larger than the confessionals but secondary to the large areas of glazing which describe the main liturgical space. A tall panel of glazing – again subdivided into square sections, illuminates the sanctuary at the eastern end of the church. The window inhabits a recessed portion of the façade; expressed internally as a focus on the sanctuary, as at St. Matthew's. Externally the roof overshoots the recess and the end (east) wall extends to the plane of the south façade. Most dominant though, is the clerestorey glazing, significant in its elevated position from the road, and as a series of nine striking rhomboidal windows – each representing a structural bay - picked out in white-painted frames against the brickwork.

The north façade, though apparently subsidiary in its position on the opposite side from Cardross Road, and directly adjacent to another building, nevertheless demonstrates a degree of symmetry in the echoed rhomboidal clerestorey windows. Below these, in place of projecting confessionals, small square openings impart a sense of human scale to a wall, which would otherwise be largely blind to clerestorey level. These low-level windows are aligned with the rhomboidal openings up until a flat-roofed ancillary zone, roughly corresponding with the side-chapel on the south side, though larger, and housing the less public functions of sacristies and WCs.

A side chapel within the low, flat-roofed block to the north of the sanctuary replicates a feature first seen at St. Laurence's, Greenock – only begun slightly earlier than St. Michael's, and otherwise contemporaneous. An oculus set into the roof over the side chapel continues a preoccupation with a feature which could be said to have begun at the Roman Catholic Pavilion - that of controlled lighting upon liturgical space – a device which would be developed over the subsequent decades of the firm's existence. Indeed, though not completely concealed, even this lateral lighting to the sanctuary by way of tall narrow glazed screens, has the effect of bathing the sanctuary in light; the source of which increases focus onto this area and is perceived only from a very acute angle of vision due to the length of the nave and its relative narrowness. The external recessing of these windows within a constructional bay that maintains the roofline and extent of the sanctuary (east) wall at the same plane as the principal south façade further seems to be suggestive of a preoccupation with and manipulation of, sources of light within the liturgical context.

Internally, St Michael's is another flat-ceilinged basilica, originally designed for some 800 worshippers, though within the last decade the three pews furthest away from the sanctuary were actually removed to increase circulation space near the entrance, and two were also converted for display purposes.[395] Economical design again underlines the sanctuary which again is demarcated by its recessed position, steps and the simplest of baldacchinos; this time a square timber panel minimally projecting from a ceiling of the same level as the nave. From the inside, the sanctuary appears to be ablaze with abstractly cast natural lighting from those tall apertures on either side of the focal space. This contrasts with the nave, which, above the level of the confessionals discreetly ranged along the south side – and along the north – takes on an almost mesmeric tempo produced by a luminous acupuncture of rhomboidal apertures within the otherwise functional tunnel of

[395] Ibid.

congregational space. The square-form openings on the north side both reinforce the sense of spatial modulation set up by the rhomboids, and impart an important sense of human scale on what would otherwise be an oddly proportioned wall with absurdly high rhomboidal clerestorey glazing. On the south side, the structural columns, which correspond with the confessionals, have a similar sense of recognition of human scale as they are only expressed as columns to a height of one storey.

The large panel of squared glazing at the south entrance – up to a height of one storey – both has the effect of rendering the heavy masonry wall above and on the line of columns to the inside of the window – appear so light as to simply glide past the wide glazed void below, and to enhance a sense of chiaroscural drama within the church.

Although now altered, the baptistery was originally in the space now occupied by the library. The sense of dramatic procession is still palpable though – from the ascent up the hill from Cardross Road, to the south entrance, through the large screen of glass and into the punctuated sobriety of the nave. Next, the route pivots about an east-west axis – the baptistery to the west, lit by a large, shallowly-pedimented window at high level – and the sanctuary dissolving in light at the far east end.

Such churches as St. Michael's, through the box-like simplicity of their spaces and volumes, pierced by small apertures of focused light, possess a purity and economy of space and focus similar to that of Corpus Christi, Aachen.

Ss. Peter & Paul, Arrochar 1953

Ss. Peter & Paul, Arrochar (1953), Gillespie, Kidd & Coia. Source: Archdiocese of Glasgow (no date).
http://www.stgildas.rcglasgow.org.uk/stspandp

In a shift in scale and environment, it is said that Archbishop Campbell commissioned the church of St. Peter & Paul, Arrochar in 1953, due to a 'personal desire' to build a church in the Highlands, a territory very familiar to him.[396] Like St. Peter-in-Chains fifteen years earlier, it is dedicated to saints connected to Rome within the Catholic faith, reputedly based on a pilgrim's account of the distance between the location where the church now stands, and the Eternal City.

As one of Gillespie, Kidd & Coia's smallest churches, it is somewhat anomalous within their body of work, but nevertheless employs a similar general design language to their previous developments, particularly in terms of its simplicity of massing and fenestration. However, in contrast to the brick-built churches of the 1930s and '40s, this church, in a similar manner to Ian Lindsay's St. Finan, Invergarry (1939; also a Highland church), is expressed in a simple white render, also featuring a small,

[396] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson., p. 41.

sculptural attached bell-tower. This is punctured through its lower half to form the doorway into the building, and at the top to provide a void to suspend the bell within. Its rubble stonework, coupled with the rendered exterior recall the Roman Catholic Pavilion, but such acknowledgement of an international modernity is tempered here by a vernacular aesthetic.

St. Maria Goretti, Cranhill 1955

St. Maria Goretti, Cranhill, Glasgow (1955, extended 1968) is an interesting and unusual example of the practice's design work from the mid-1950s. The original building is clearly part of the series of designs to emerge in the early '50s. It does seem, though, to develop architectural concerns expressed during the previous five years.

One in the series of sober oblong brick buildings, St. Maria Goretti very much demonstrates a familiar underlying spatiality. It is designed around a west-east axis with the sanctuary at the westernmost point of the building and the baptistery and main entrance at the eastern end, approaching from Bellrock Street, which is angled south-west / north-east past the site, skimming its south-eastern edge close to the entrance. Surprisingly, it is not a large site, given that Cranhill is a new district close to Glasgow's north-eastern periphery, and green space abounds. Still to be seen here is the familiar organisation of built elements around the site; the church itself is aligned with Newhaven Road, thereby creating a garden front onto Bellrock Street, with the attached presbytery at right-angles to the church; it's main façade in dialogue with Bellrock Street.

Strictly, this is a church of two phases; the original building being extended in 1968 by Gillespie, Kidd & Coia to provide a hall at the east end – a half-octagonal punctuation between the original frontage and the conspicuous junction of Bellrock Street and Newhaven Road. Consequently, the original entrance front is effectively obscured, but the entrance itself remains in its original position – the signature flat- roofed canopy at the south-east corner of the building now assuming even more significance as it reveals its corner – hovering – between the original building and the 1960s extension.

In form, St Maria Goretti addresses the question of the expression of the individual elements of the church. Previously, they were often presented additively (particularly at St. Michael's), where the main liturgical space was contained under a taller pitched-roofed volume, with ancillary spaces often 'added' on in cubic accretions around its

periphery. At St. Maria Goretti, there is an emphasis on the inclusivity of different elements within the overall three-dimensional form; much like the tendency with a French Gothic cathedral to be expressed with an overall deliberate outline; whilst English Gothic ecclesiastical buildings where generally more ad-hoc in the expression of their component parts. A shallow pitched roof in monolithic profiled grey sheeting sits lightly atop a brownish-red brick box, extending at the same pitch to incorporate expressive volumes of space where necessary and appropriate. In this manner, the impression is of an entire mass that has been carved out or subtracted from, according to the positioning of particular liturgical functions.

The north elevation models itself around the confessionals, which have a familiar mode of expression to earlier churches such as St. Michael's, where they are expressed in a linear lean-to continuity; the function within somehow all the clearer for its lack of explicit external expression. Three small rectangular windows – widely spaced – are the only aesthetic relief on the lower wall, apart from a doorway that merely whispers its presence at the junction of the extension and original building, towards the east end. The north façade also deals with clerestorey glazing in a similar manner to some of the earlier churches of the decade; a small window indicates each structural bay, but this time they are square rather than rhomboidal. Towards the west end, a shallow protrusion suggests a transept, which is mirrored on the south side. Its abstract cubist character is reinforced by the transepts' complete lack of fenestration, and forming, on the north side, a continuous right-angled volume of space with the confessionals.

The sanctuary end, as opposed to examples such as St. Laurence's and St. Michael's, is largely undifferentiated from the main liturgical volume. Apart from its shallowly canted west elevation, mirrored about the centre, the sanctuary is blind, save for a clerestorey level three-part window at the western end of the north elevation; acting as a hidden, asymmetrical light source over the sanctuary.

The south side of the sanctuary becomes obscured at lower level by a chimneystack, which rises out of a single storey flat-roofed structure that links and mitigates the transition between church and presbytery, so that each is articulated; expressed, yet part of the whole composition. The remainder of the south elevation, up to the protruding entrance volume at the west end, demonstrates a control similar to the north side, but here – as at St. Michael's, small square windows at ground floor level diffuse concerns over the disparity of human scale set against a monolithic plain brick wall. On this, more public – and light - side, clerestorey glazing manifests itself as a continuous horizontal ribbon, with its divisions relating to the structure within. This seems to contribute further to

the abstract, carved quality of the building; forming a slot or void between the top of the brick wall and the roof, engendering a pleasing articulation of the primary elements of wall and roof.

The house itself is unremarkable except for the fact that its physical connection to the church reinforces a familiar configuration of built elements. However, it is very much on the axis of public scrutiny, being part of an ensemble that addresses the entry onto the site, so it is important and interesting to discuss its character. Also finished in reddish-brown brickwork, the presbytery in this respect acknowledges the importance of the ecclesiastical complex as a whole rather than on the hierarchy of individual components. The shallow pitched roof, however, is finished in patinated green copper profiled sheeting, contrasting with the grey of the original church building, but harmonizing with the extension. The chimneystacks puncturing through it in an asymmetric arrangement on either side of the ridgeline intensify its thinness and lightness. Below, compactly arranged accommodation eschews superfluity in a polite, contained rectangular volume with no extraneous accretions or projections; simplicity of line and economy of material prevail. Although there is a complete absence of detail in contrast to the firm's 1930s presbyteries, a similar disregard to symmetry exists at St. Maria Goretti, as it had with earlier presbyteries. Its use on the actual church building is mixed over the decades; St. Patrick's, St. Peter-in-Chains and the Roman Catholic Pavilion being notable largely asymmetrical examples of the firm's first phase of church-building, and St. Laurence's being in the minority of post-war examples to employ a generally symmetrical aesthetic.

The presbytery is two storeys high, with simple fenestration arranged in multiples of equally dimensioned vertically-orientated rectangular panes of glazing; some of which function as opening lights. Doorways are simply executed and uncelebrated. In many ways this is an emotionally desolate building, but one based on already-established principles and patterns, and an almost unencumbered sense of legibility.

St. Paul's, Glenrothes 1956-7

St.Paul's, Glenrothes (1956-7), Gillespie, Kidd & Coia. Source: The Glasgow School of Art (no date).

St. Paul's, Glenrothes is often described in terms of its differences with the firm's previous repertoire, but it can also be viewed as a stage in the development of pre-established themes. Most obviously, this is a building with a distinctive form and aesthetic; a geometrically reductive, white-painted common brick complex, set within a large site, surrounded by dense foliage to the south. It both maintains the informality of the early '50s cluster, in the off-centring of the main entrance, the placement of the crucifix internally, and in the asymmetrical form of the presbytery. However, the building is simultaneously intensely formal in its truncated triangular form, with a tense and very deliberate focus on the sanctuary – a common theme in a number of the firm's churches; particularly the Roman Catholic Pavilion and St. Laurence's.

With the main entrance façade to the west, the small building is contained within a solid, blind, brick envelope to the south, east and north. Even the sanctuary, although

orientated to the east, is illuminated by west light. Coupled with the relative solidity of the presbytery at the westernmost edge of the complex, a distinct place of entry is convincingly suggested between this and the west façade of the church, by virtue of it being profusely glazed, in contrast to the severity of the blank elevations. Entry is further described by the widest side of the truncated wedge, an efficient if literal gesture. However, banality is avoided throughout this church by moments of direct symbolism being tempered with unforeseen manoeuvres, such as those asymmetrical elements mentioned previously.

The glazed west façade is immediately intriguing given its apparent arbitrariness of design. However, on closer examination its horizontal divisions – two broad, flat timber transoms creating an unequal tripartite arrangement of glazing - appear to correspond with internal points of reference. The lowest transom correlates with the height of the font, table tops and pews within, whilst the uppermost aligns approximately with the height of the screen separating the notional narthex from the main body of the church. Glazing is a combination of clear and coloured, and smaller horizontal, flat timber elements set at varying levels that further sub-divide fenestration. Vertical timber divisions create modules of glazing of alternating width, this time with seemingly less reasoned placement. Mullions are in high relief and expressed on an anterior plane to the transoms, each end visible and unattached, creating an elevation that is dynamic, yet neither focused on its horizontal nor vertical trajectory. Instead, with the sense of depth created by the positioning of the mullions, the intense, oscillating façade seems to gravitate towards the interior of the church, as a magnet towards its monochrome serenity. A deep parapet surmounts the elevation, concealing a roof that in fact consists of a trio of triangular sections; the middle one flat, with one interlocking, low-pitched flanking triangle on either side. The glazing of the lantern above the sanctuary assumes a similar aesthetic; in effect a dynamic filter for diffuse light onto the altar.

The presbytery is very much a part of the architectural ensemble, but it is subordinate to the church, despite the small size of the latter. Its low, single-storey presence maintains the same language as the church; white-painted brickwork with dark window frames and parapet. Fenestration on the public (west and north) side of the building has a similar air of arbitrariness as the church. Initially, this seeming lack of hierarchy shocks, but when the presbyteries of the early ‘50s cluster are compared with those of the ‘30s, a general trend of geometrical simplification and hierarchical flattening becomes apparent. This is apparent from the presbyteries of St. Anne’s and St. Columbkille’s, with their vertical demarcation of front entrance and principal reception rooms with bay windows, to the

legible yet plain presbytery of St. Maria Goretti, to the functional ambiguity of St. Paul's. On the other hand, the actual church building of St. Paul's is manifestly the opposite in terms of demarcation of liturgical function.

Internally, St. Paul's advances the visitor into the building in the most economical manner. Having entered the building by way of the glazed walkway that connects church to presbytery, the entrance area of the church, enlightened by the glazed screen of the west elevation, has the slightest separation from the main liturgical space, by way of two adjacent partitions, which reach neither the ceiling, nor the converging walls on either side of the building. Visitors are denied a direct view of the principal liturgical focus, yet offered glimpses of the space indirectly. These brick-built screens are painted white also – and indeed all of the internal walls of the church – such that no distinction is drawn between the exterior and the interior in colour, texture or material. Brickwork projections set at 45 degrees to the principal plane, animate the screens in much the same, seemingly arbitrary way as the glazing of the west front; sometimes the projecting triangular columns that are created are one brick high, whereas others employ significantly more stacked bricks. With the coloured, deeply recessed glazing opposite, and the associated effects of light and shade, these make for an intensely sculptural ambience before entering the main liturgical space.

Beyond, a broad space has an emphasised sense of reverse perspective; the low timber pews, the low, flat ceiling clad in dark stained timber strips, and the church's angled walls, diverging as they reach the sanctuary – a surprising decision, but one which allows more of the congregation to be seated near to the front than to the back. Of course the real shape and function of St. Paul's exists by virtue of the sanctuary, centred on the east wall of the building – a brick-built projection which rises significantly above the level of the roof of the main liturgical area; a monopitch slate-covered roof filtering west light down onto the altar beneath.

Chronologically speaking, St. Paul's and St. Joachim's, Carmyle, Glasgow (1956) are puzzling within the practice's repertoire. Virtually contemporaneous, they appear to exist at a key juncture within the practice's design output; but not solely because of the reason which is frequently associated with St. Paul's – that different personnel were involved in its creation – but also because there appears to be, at this point, a divergence in the firm's own liturgical philosophy. It has already been mentioned that St. Paul's displays a preoccupation with dramatic emphasis of the sanctuary - a device that had already been experimented with at some of the practice's earlier churches – but the

early ‘50s cluster had begun a shift away from such emphatic literalness in favour of a form and envelope which only subtly distinguished sanctuary from nave. If this had become overwhelmingly evident at St. Maria Goretti, at St. Joachim’s it is, ironically, blatant in the subtlety of this design gesture. This would suggest both a design philosophy that existed in continuous evolution from the beginning of the 1930s to the end of the 1950s, and one which began in the mid-1950s, that retraced earlier motifs and intensified them.

St. Joachim’s, Carmyle 1956

St.Joachim’s, Carmyle (1956), Gillespie, Kidd & Coia. Source: Chris Upson (2006). http://www.geograph.org.uk/photo/131443

St. Joachim’s is in Carmyle – a village to the east of Glasgow, extended with the construction of post-war housing. The church itself is set in a large plot at the end of Inzievar Terrace, and although bounded by a railway and motorway to the north and north-east, the environment is verdant and spacious. It has a presence, despite the simplicity of its components, and is a continuation and development of the early ‘50s cluster.

The church maintains a similar economical outline that St. Maria Goretti demonstrates,

yet in part, it is even stricter here – an oblong box with a shallowly pitched roof – in buff-coloured brick and grey profiled sheeting, respectively – with only the campanile for relief and focus. However, there is a reversion to the low-level, flat-roofed accretions of the ancillary spaces of St. Michael's, St. Eunan's, and St. Matthew's, but here there is a visual and material reduction of all of these in almost every way. Within the early '50s cluster, there have been two sub-types of design – those with a canopied main entrance on the long elevation, pivoting on an axis with the baptistery poised to the left of this, on the 'principal' elevation, and the greater portion of the church to the right of the entrance, such as St. Matthew's, St. Eunan's, and St. Maria Goretti; and those that display a similar design vocabulary generally, but with the main entrance on the principal end elevation (albeit with a secondary entrance on the long elevation), such as St. Michael's. However, St. Joachim's neither has an entrance on its short, 'principal' elevation, nor does it have an entrance on the long elevation with concrete canopy and articulated baptistery to its left-hand side. Instead, the campanile is made to serve multiple functions. Positioned within it is the main entrance at ground level, with the campanile expressed almost as an outline, described by way of piers within the brickwork, and piercing through the roof in a hollow, pitched arch leaving carillons and sky clearly visible in the implied interior of the bell tower within. This subtraction of material and doubling of function is both subtle and incredibly intense, but although striking, it logically extends an implied practice philosophy explored from the 1930s – a (Beaux-Arts) rationality that relies on economy and practicality of structure, materials, form and metaphor. This subtraction of superfluity allowed the Roman Catholic Pavilion to emphasise the sanctuary in the absence of a roof above the 'nave', and at St. Michael's, a prototype for St. Joachim's emerges in its lofty, vitrine-like display cabinet campanile.

St. Joachim's also displays that peculiar fascination with window geometry, in a similar manner to St. Michael's and St. Laurence's,[397] here experimenting with both rhomboids and broken hexagons.

Above the entrance doors, a sculpture in white and terracotta colours demarcates the entrance and clerestorey level, whilst the continuation of the campanile above acts as a vertical marker of entrance in a similar manner to the presbyteries of the firm's 1930s churches. However, at St. Joachim's the roofline is only disrupted to allow the walls of the campanile to pass upwards through it.

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[397] British Listed Buildings (no date) *101, 103 Inzievar Terrace, Carmyle, St. Joachim's Roman Catholic church and presbytery, Glasgow.* [Online] [Accessed 1st May 2015] http://www.britishlistedbuildings.co.uk/sc-33670-101-103-inzievar-terrace-carmyle-st-joach

St. Kessog's, Balloch 1957

St.Kessog's, Balloch (1957), Gillespie, Kidd & Coia. Source: Author (2007)

St. Kessog's, Balloch is a curious church, appearing to acknowledge and simultaneously exhibit, design features which had, until then, been separated. Volumetrically and spatially, it locates itself within the narrow, basilican halls to emerge during the post-war period; a simple oblong nave preceded by narthex, with confessionals ranged, for spatial economy, at the south (entrance) end rather than along the length of the nave, due to its narrowness. A side chapel, sacristy and secondary entrance occupy the north-west portion of the building, defined by a simple row of columns. Like St. Maria Goretti, the expression of these peripheral spatial elements is such that they are encompassed by the overall outline of the building; the simply-pitched roof extending to incorporate these.

Whereas previous churches of this type have been executed in brickwork, intriguingly, St. Kessog's returns to a white rendered finish – only the third such use since St. Peter and Paul and the Roman Catholic Pavilion. Its use here is remarkably conspicuous due to the almost blind front elevation, where an absence of overhang or fascia to the gable allows the render to almost meet the roof plane. The resultant simplified abstraction is only relieved by the sculptural porch, entrance doors and bell

mounted on a carved stone plaque above. Fenestration on the front elevation is nothing more than a tiny square pane on either side of the entrance, and narrow bands of fenestration along the length of the building. The church came into existence roughly contemporaneously with St. Paul's, and despite the obvious difference in layout, it is hard to ignore the sense of geometric and aesthetic abstraction common to both.

St. Paul the Apostle, Shettleston 1959, and Saint Vincent-de-Paul, Thornliebank 1959

St. Paul the Apostle, Shettleston (1959), Gillespie, Kidd & Coia. Source: Scotland's Churches Trust (no date). https://www.scotlandschurchestrust.org.uk/church/st-paul-the-apostle-shettleston-glasgow

1959 saw three churches designed, culminating in the most prominent - St. Charles's, North Kelvinside, Glasgow. St. Paul the Apostle, Shettleston and St. Vincent-de-Paul are less imposing examples, although the preoccupation with the dematerialisation of the campanile begun at St. Michael's, comes to full fruition at St. Paul the Apostle. This church is a modestly detailed brick basilican building heroically preceded by an attached campanile, reduced materially to a large brick portal, which becomes little more than a frame for the composition of pale-coloured

statuary within. Saint Vincent-de-Paul is a plainer affair, although its brick bulk at the front is replaced by a large expanse of infill glazing, as at St. Andrew's, but on a more substantial scale.

St. Charles, Kelviside 1959

St.Charles Borromeo, Kelvinside (1959), Gillespie, Kidd & Coia. Source: Author (2007).

St. Charles Borromeo, one the last of the post-war decade, is situated in a dense residential neighbourhood at the gateway to the city's West End in very close proximity to St. Columba's. St. Charles Borromeo is one of the most striking of the practice's ecclesiastical schemes, as it begins to break down many of the church's component parts into an arrangement of functions expressed individually through its architecture. This provocative decomposition of elements is not therefore a function of a cramped or otherwise awkward siting, rather, a deliberate examination or manipulation of distinct areas of the church's liturgical programme.

Orientation is east-west, with the entrance facing east and the sanctuary addressing the west, at the eastern end of Kelvinside Gardens, on a site that for all intents and purposes appears almost as a piazza in the middle of suburban Glasgow. At the junction of

Kelvinside Gardens and Kelvinside Gardens East, the site widens into a piece of civic space, but with no grand vista or particular focus. Instead, a change in level, which separates Kelvinside Gardens East from Melrose Gardens, imparts a picturesqueness to the entire composition, and interest to the church, which extends an additional storey downwards on its south side where it addresses the gable ends of the four-storey terraces of Melrose and Dryburgh Gardens.

The nave and sanctuary are coupled within the largest element; a large oblong block, rounded at the west (sanctuary) end, as an apse. This principal element of the ecclesiastical complex is delicately framed in concrete; the first example of a Gillespie, Kidd & Coia church displaying its structural frame externally. Previous examples demonstrate that it has been exposed internally – particularly so at almost all of the firm's 1930s churches – and again at St. Laurence's. On the other hand, a proportion of the rest from the early 1950s tended to conceal the structure within the planar simplicity of their reductivist components.

At St. Charles Borromeo, the syncopation of the elements, elicited by a powerful structural matrix seems to control one's experience of the church. Entry is at the east end, beneath the gable, infilled mainly with reddish-brown brickwork at ground level. Above, a lateral concrete element surmounting the timber entrance doors frames a pleasing hierarchy of orthogonal elements. These create a vast glazed screen organised by rows of secondary horizontal concrete structure and slim, double vertical concrete elements regulating the elevation into modules, which are further sub-divided into eleven slim, vertical panels of glass, separated by a single slim concrete mullion. A narrow band of glazing extends below the lateral structural element, effectively separating the brickwork from the concrete structure – as if to further emphasise its presence and a turning away from solid load-bearing masonry construction. But the visitor is not simply presented with the severity of the east elevation; approach to it is tempered by the one-storey baptistery that appends itself to the main building front at ninety degrees. This is an element that speaks of the playfulness and liberation that can be achieved when the structure and walls of a building are separated. Here, the concrete frame is even more highly abstracted from the walls; an orthogonal exo-skeletal structure which allows a brick wall within to envelope the space inside. The separation of skin and structure is, however, particularly emphasised by the hemispherical completion of this element of the church. Externally, this is not only a more polite resolution to a volumetrically subservient part of the building, but one which seems to exist hierarchically – deferentially leading to the main entrance within the semi-enclosing crook that it creates with the main entrance

front of the church.

Inside the main entrance, a narthex provides a transitional space beneath the gallery. A narthex, by its nature, is a transitional space, but at St. Charles Borromeo, its transparency with the main liturgical space beyond underlines the motive for entering the church at all – the ritualistic element of the liturgy is observable from the outset, and not gradually discovered, in differentiation to St. Paul's, Glenrothes.

Behind, and to the north of the main entrance, the baptistery is an introspective space in which the curved brickwork has a softening effect as it envelopes the small room. Lighting is indirect from either side, at the point where the room adjoins the main part of the building, and in the centre of the ceiling, an ocular feature returns to bathe the space in more indirect light through the thick concrete roof. The intimacy of this space contrasts spectacularly with the scale and openness of the nave and sanctuary.

Framed by the exposed concrete structure, the nave is entered by way of doors forming part of a clear glazed infill screen; the angled geometrical concrete planes of the ceiling dipping down to meet columns and canting up to emphasise the centre of the structural bay, and therefore on axial focus with the sanctuary at the west end. Beyond the doors is a vast, single worship space, with ancillary spaces on either side. The relationship of structure, infill and the glazed gaps in between creates a rich and dramatic ambience of intense light and deep shade; and cast shadows that enliven the sheer planes of brickwork.

The legibility of St. Charles's is striking. There is an anthropomorphism to the spindly columns; tapered surreally and positioned along the nave and around the sanctuary; creating, with tall, curved, brick infill panels, a broad apse, whose radius causes the facetted concrete roof to take on an even greater intensity. On either side of the nave, the horizontal concrete structure that lies just above one storey in height, laterally stabilises the vertical tapering legs until the point, on both the north and south sides, just before the sanctuary, at which there might be transept. At St. Charles's, however, large panels of clear glazing take the place of transepts. In a similar manner to the entrance front, the glazing surmounts the horizontal ring-beam, which terminates at the curved brick walls of the apse. Here, the glazing assumes a similar language of slim concrete transoms, dividing the panel into four tranches of glazing; each of which is then subdivided vertically by even slimmer concrete mullions. The entire periphery of the church at what would nominally be clerestorey level, is glazed above the level of the brick infill walls, and separated into bays by virtue of the vertical columnar structure.

Each bay of high-level glazing is angled at the top to take account of the concrete roof, which itself is angled into triangular sections over the entire area of the roof.

Throughout the church, materials and forms are articulated with intense clarity; from the concrete skeleton and roof, and brick infill, with glazing that both defines their material and structural compatibility, and also their individuality and separateness, down to the altar and solid altar rail expressed in different types of marble. This is so even in the feet of the altar rail, which are triangular chunks of contrasting stonework. While the early '50s cluster seem to emphasise a preoccupation with volumetric abstraction; with cubes of space that shift into positions which articulate an architectural autonomy from one another; and a sweeping horizontality perhaps anchored by the counterpoint of a campanile. St. Charles Borromeo is defined by the upward emphasis of a structural skeleton and by a complete separation of functional entities and a deconstruction and expression of parts forming a whole. Aside from the material expression of its parts, the most striking observation about this church is the extrication of campanile and baptistery to form completely separate elements. In their expressive individuality they temper the conspicuousness of the extant presbytery – a detached Victorian villa in the north-eastern corner of the site. But unlike an English Gothic cathedral with a detached chapter-house and cloister defining the precincts of the church, Gillespie, Kidd & Coia succeeded in tempering the homogeneity of the main liturgical volume with an abstract arrangement of variously expressed supporting elements on an adjacent plot of roughly the same dimensions.

The south side of the church falls away, plunging down another storey to take account of the level change between Kelvinside Gardens and the streets to the south. A tall elevation is created, where the concrete frame still regulates and reddish-brown brickwork gives the impression of a cliff or quarry-face, despite the regularity of the material elements. This is an elevation that excites though, for it does not merely present a flat façade, but one which is animated through secondary elements. A three-bay, flat-roofed volume, two storeys high and containing a side-chapel, shrine and confessionals, breaks off the main body of the church, somewhat oddly at angle, mitigating the angled plot boundary on that side, and perturbing the otherwise orthogonal regularity of the other building elements. In characteristic language, this volume is at once an anomaly and an integral part of the church's distinct vocabulary. Its three structural bays are infilled with brickwork, with each panel separated from the concrete roof by a narrow band of glazing, subdivided vertically, in a familiar manner with slim concrete mullions. The easternmost bay is broken down further; the concrete slab of the intermediate floor

on show but recessed from the vertical structure. Below this is the void of another narrow strip of glazing – ever ensuring that there is both legibility of structure and clarity of intention.

Aligned with the principle vertical structure of the main church building and abutting the wide end of the angled volume is a forceful vertical punctuation mark – a plain brick-built chimney stack rising from ground level to several metres above the level of the roof of the main body of the church. To the east of this, to the vertical concrete frame that delineates the corner of the building at its eastern end, is a storey-high panel of glazing; in effect, breaking down and significantly inverting the hierarchy of brickwork and glazing. The glazing features, unsurprisingly, subdivision by way of slender concrete mullions, so that the individual panes of glass are very tall and narrow. Here, the subdivision is regular and equal though, in contrast to the clerestorey panels, which play out a rhythm of vertical panes, unequally spaced and appearing to ripple along the elevation in waves.

This bay-wide panel of glazing is subdivided further below the main concrete ring beam by a much narrower, recessed horizontal element, which translates visually to the roof slab of the baptistery that projects off the front façade. This volume continues the vertically divided glazing – but now only one storey high – stopping to allow the brickwork to recess in from the roof slab and curve round hemispherically to the opposite side.

As Proctor comments on the adaptability of the basilican layout,[398] St. Charles Borromeo is a church that demonstrates that this plan type could still be innovative and relevant on the eve of the Second Vatican Council, and at a point in the practice's trajectory where they had already experimented with an alternative – as at St. Paul's, Glenrothes. It also deals with their preoccupation with a sense of theatre and procession and manipulation of the liturgical repertoire to this end. It is difficult, therefore, not to view St. Charles Borromeo as a development of the brick basilican churches of the earlier part of the decade, rather than a wholesale change in design direction.

[398] Proctor, R. (2014). *Building the modern church.* Farnham: Ashgate Publishing Limited., p. 185.

St. Mary of the Angels, Camelon 1961

St.Mary of the Angels, Camelon (1961), Gillespie, Kidd & Coia. Source: The Glasgow School of Art (no date).

St. Mary of the Angels, Falkirk followed the heroic distillation of structure and volume of St. Charles Borromeo, and what is striking is the design paradox that it displays. On one hand it is a development of the brick basilican churches of the firm up to now, yet on the other, it appears to deny this by virtue of its pared- back, flattened aesthetic, such that if previously one had been given clues as to the building's function, at St. Mary of the Angels these are largely absent. Even the presbytery is joined to the church in a way that casts a certain measure of ambiguity – whereas Holy Family, St. Charles Borromeo and the Roman Catholic Pavilion separated out the various components of the ecclesiastical whole (even St. Paul's, Glenrothes did this to some degree), at St. Mary's, these are largely suppressed.

The building occupies a large site on the corner of Glasgow Road and Watling Street in Camelon, on the western edge of Falkirk. It is orientated with the main entrance to the

church at the north end and the sanctuary at the south, with the presbytery extending out of the south-west corner in a crisp 'L' configuration. The building exhibits no strongly orientating features, and does not demonstrate the preoccupation with passage or procession – a self-declared theme of Metzstein and MacMillan, reflected in themes of modernist circulation such as the *promenade architecturale* evident in Le Corbusier's work, as some of the firm's later churches would do. Instead, this is a very introverted scheme, with much of the interest being inside the building.

The two principal levels of the church relate to connected but distinct areas within. Both flat-roofed, the higher portion houses the nave, whilst the lower level relates to a substantial side-chapel. This relationship of nave to flat-roofed side-chapel has been seen many times before in the practice's history, but here the two elements are treated in the same way, as if to emphasise their connectedness and a present if less pronounced hierarchy.

The church is constructed of cream and pinkish to buff-coloured brickwork, intriguingly laid in bands of three courses of stretchers interspersed with a full row of soldiers; the whole effect being visually dynamic. Yet, at the same time, it is highly regimented, with the brickwork employed to demarcate fenestration (of varying dimensions and shapes) by virtue of its inherent modularity. The brickwork is particularly interesting because it is not treated as a defining envelope, but rather more abstractly as the outermost screen of a build-up of wall, which allows the physical properties of the bricks determine the extent of panels of solid brickwork and areas of glazing. The front façade is unrelieved of any newly distinguishing characteristics. The focus is placed on the timber entrance doors set mid-way along the width of the taller nave volume. Directly above, narrow horizontal glazing cuts into the brickwork skin, asymmetrically extending westwards along the elevation, and stopping to emphasise the thickness of the east wall. Clerestorey glazing tops this façade, as it does on the others. At the interface of the taller volume and the lower volume, an 'L'-shaped window opening defines the two parts of the building. Its horizontal element extends westwards, acting in dynamic opposition to the fenestration above the main entrance, which extends towards the east wall. There is no clerestorey glazing on this façade, but the blank clerestorey level sits lightly and slightly recessed at the top of the brickwork. Above that, a triangular light 'cannon', orientated west, is visible above the flat roof, illuminating the gallery below.

The longer west façade is also mediated in height by the imposition of the lower volume against the taller. The blind brick wall of the side-chapel is offset by highly animated clerestorey glazing – a single horizontal band for the side-chapel, and a much greater

amount in the nave wall. A similar narrow horizontal ribbon of clerestorey glazing tops the nave wall, stretching the entire length of the façade. Below, further glazing extends down to the level of the side-chapel roof. Again, an apparent arbitrariness of division of the panes lends a certain dynamism to an otherwise plain façade. At the north end, the brick wall of the front elevation wraps around to define the gallery, causing a distinct legibility between it and the nave glazing. Above this, the glazed face of the light cannon, with offset metal cross in front, marks the threshold into the church. At the opposite (sanctuary) end, another triangular light cannon with offset metal cross fixed just above its glazed north face, marks the position of the sanctuary below; once again shedding diffuse and indirect light onto the altar.

When the west wall meets the presbytery at the church's south end, the aesthetic is very similar. Indeed, the 'L'-shaped house forms part of the ensemble rather than being detached from it. No distinction in height is made either; in fact, the clerestorey level continues here, manifesting itself as high-level glazing within certain rooms of the house. As stated previously, the brickwork is treated such that, despite the amount of it, it is not necessarily the defining feature of the building as a whole. It is not a 'punched' envelope; rather, it appears as irregularly orthogonal panels, which stop to allow fenestration to emerge in between. Fenestration on the house (apart from the high-level glazing) generally appears as vertical panels of floor to ceiling glazing; divided horizontally by a broad transom to allow an openable top pane. This fenestration is not uniform though – the window to the curate's bedroom, on the north façade of the presbytery, has a narrow vertical fixed pane beside the wider panel with the opening pane. The mullion that separates them continues up to form a mullion in the high-level horizontal glazing just below roof level. A front door with top and bottom glazing separated by a broad rail forms the front entrance. Above, a narrow horizontal light would suggest a very conventional entrance, however, once again, this continues asymmetrically to the east. Where it stops, the glazing continues vertically back to ground level in another narrow slot of glazing, all resulting in a square panel of isolated brickwork between it and the front door. Other variations on the original window module appear according to the use of the space behind. Living spaces, unsurprisingly, are identified with larger areas of glazing, bedrooms and more private spaces (eg. the callroom) with the original module or just over, and bathrooms with high-level glazing or none at all. Even the presbytery has a triangular light cannon above the entrance. The west façade of the church features orthogonal protrusions housing confessionals and a shrine.

The church is entered by way of a narthex several steps below the level of the main liturgical space, and extending across the entire north front of the building. Ascending

steps, the principal level of the church space is arrived at; a further stair leading to the gallery above (the taller volume only). Entrance into the nave is by way of an aisle, which runs the length of the junction between the two volumes. Its asymmetrical nature lends only an oblique view to the high altar. Direct focus is, instead, on the tabernacle within the sanctuary at the far end. This contrasts with the majority of previous Gillespie, Kidd & Coia churches, which have predominantly been organised around a central axis. Perhaps due to its abstractness, the overwhelming feeling seems less focused on a priori liturgical expectations, and more on a universal kind of spirituality, which celebrates materials, craft and light. A row of split timber posts form the structural basis of the joining of the two volumes. These are positioned on one side only, such that the main aisle is actually within the lower, side-chapel volume, and therefore in the subsidiary space rather than the main liturgical space adjacent. These twin columns support deep timber glulam beams, the articulation of which is celebrated in the slight cantilever beyond the posts, into the larger volume. Comparisons to the spiritual architecture of Northern Europe, and the structure to that of Mackintosh.[399] The use of deep timber beams is repeated over the main liturgical space, connecting to the top of the wall at clerestorey level. Light is therefore modulated by structure, diffuse and indirect, and seems to dissolve structure around the periphery where it is most intense. Stone flagged floor, exposed brick walls (laid in the same pattern to those on the exterior), and timber structure and pews, have an Aalto-esque quality when combined with the indirect light from the clerestoreys and light cannons.

[399] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson., p. 73.

St. Martins', Castlemilk 1961

St.Martin's, Castlemilk (1961), Gillespie, Kidd & Coia. Source: The Glasgow School of Art (no date).

St. Martin's, Castlemilk, reverts to the strongly formal model developed at St. Paul's, Glenrothes, five years earlier. It also is situated on a site within an area of extensive greenbelt land, adjacent to Cathkin Braes Country Park. It demonstrates, as St. Paul's, a more sculptural approach to the long list of rectilinear 'basilican' layouts that characterise much of the practice's work from its 1930s beginnings to the 1960s. It features a gentle wedge-shaped structure with attached but separate presbytery. There is no attempt here to reconcile different elements within the overall outline of the ensemble, as at St. Mary of the Angels; yet the main character of the ensemble – the church itself – behaves quite idiosyncratically in its near symmetry of outline and peculiarity of form.

The architectural characteristics are shown clearly, in contrast to St. Mary of the Angels, and is suggestive of a priori ideas concerning liturgical form. Currently, grey harling masks the original external brick finish with concrete detailing; a feature that envelopes

the entire perimeter of the building.[400] Approaching the church from Ardencraig Road, the terraced ascent of the site toward the ensemble of built elements is striking, and it is here that the effect of the harling covering is most notable in its negation of visual impact that was formerly offered by the more modularised use of concrete and brickwork. The three-storey presbytery is the first component in a series of three buildings, which together form the church. Originally, this was constructed such that the concrete floor slabs were expressed externally, with the walls of each storey expressed in plain, stretcher-bond brickwork. In this regard, it differs from the playfulness of the brick detailing of St. Mary of the Angels, yet it echoes the language of the fenestration there. Again, the brickwork suggests the outlines of the various modules that the glazing assumes. Once again, this is treated as floor to ceiling units of varying widths, and apparently arbitrary use of high-level horizontal glazed units that link to another vertical unit. It is orientated north-south, with the north facade of the presbytery facing the road. The dominant façade is that which draws the visitor toward the hinge-point of house and main church building, and hence the main entrance to the church. The presbytery is given prominence on this side with a sharply monopitched roof clad in green patinated copper panels, and is expressed as a volume that jetties out beyond the narrow north elevation, from first floor level. To the east of the north elevation, a large window, unusually with an arched head cast into the concrete slab, recalls similar construction methods to those used by Le Corbusier at Maisons Jaoul. The eastern volume of the presbytery is flat-roofed and therefore terminates below the adjacent monopitch. This is actually the constituent that connects to the main church building, in a similar manner to that used between the church and campanile, at Holy Family. Above the flat roof, a central spine of high-level glazing – really the vertical side of the monopitch structure – admits diffuse light to the interior. The east façade of the presbytery demonstrates a similar language of glazing to the main (west) façade. The application of harling both here and on the main church building imbue them with the feeling of a harled Scottish towerhouse, with its fenestration of varied dimensions and at varying levels.

The entrance to the main church building is arrived at underneath a concrete terraced area at first floor level, supported on concrete columns. Entrance into the church is therefore concealed and mitigated by a darkened transitional zone. Beyond this, the church fans out to a wider south end. An angled ‘wing’ flanks each side of the nave, each with oddly sized and placed fenestration. Each lateral wing is roofed with a green-patinated copper monopitch, with a diagonally aligned ridge, such that the monopitch

[400]Rodger, J. (2007) ‘Major works.’ *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987.* Glasgow: RIAS in partnership with The Lighthouse, Scotland’s Centre for Architecture, Design and the City., p.239.

becomes deeper as it progresses towards the southern end of the building. At this point it joins the centrally-positioned hemispherical apse, which rises above the level of the nave roof. The two 'wings' frame a central section of roof above the main liturgical space, laid in an almost factory-like configuration of serrated rooflights. The horizontal bands of glazing are shallowly arched, and once again admit light to the interior; diffuse north light being trained onto the altar.

Internally, St. Martin's is laid out in a very similar manner to St. Paul's, only it is larger – capable of seating around 600 people. In the basilican layouts, confessionals have tended (with a small number of exceptions) to be housed in additive built components at some point along the length of the nave. However, the firm's three churches based on the wedge-shape model (St. Paul's, St. Martin's, and St. Mary's (Bo'ness) all accommodate them at the narrow end of the wedge, as it were; close to the entrance, and at the opposite end of the building to the sanctuary. Entry to St. Paul's is off-centre, just to the east of the central axis; however, as opposed to St. Mary of the Angel's, the principal layout of the building is otherwise symmetrical. Seating at St. Martin's, as at the other two of similar design, is arranged such that it flanks the central axis of the aisle, and each pew increases in length towards the south (sanctuary) end, following the splay of the side walls. This arrangement is logical in terms of seating a greater number of people close to the sanctuary, but also means that lines of sight diverge from the sanctuary rather than converge towards it; yet in other respects, focus is directed towards it. Light in particular is either focused from the glazing between the 'bowstring trusses' above,[401] or else from glazing within the side walls; the apertures being angled within the depth of the wall towards the altar.

[401] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson., p. 74.

St. Mary's, Borrowstouness 1962

St.Mary of the Assumption, Borrowstouness (1962), Gillespie, Kidd & Coia. Source: The Glasgow School of Art (no date).

St. Mary of the Assumption, Borrowstouness, was demolished in 1988 but is nevertheless important to include as part of this study; indicating a particular formal concern at a point within the practice history. As previously alluded to, along with St. Paul's and St. Martin's, St. Mary of the Assumption was designed around a wedge-shaped plan with articulated built components such as the baptistery.

This church, however, does not include a presbytery as part of the architectural composition. Smaller than St. Martin's, it is also the most pronounced of the wedge-model; a much more acutely angled design which would have concentrated even more of

the congregation at the sanctuary end of the building.[402] Of the three churches of this type, St. Mary's best demonstrates the dominant concerns of placing people as close to the sanctuary as possible; and also of focusing light on the altar.

The church was situated on a relatively flat green site on Linlithgow Road in Borrowstouness – a small town on the southern bank of the Firth of Forth, to the immediate north of Linlithgow. Entry into the building was via a glazed porch, which was the element of articulation between the main church building and the baptistery. Formally, the church was more abstract than either St. Paul's or St. Martin's. It was designed, as St. Paul's, with a white cement-render finish over load-bearing brickwork, which increased its abstract qualities and seemed to encourage greater perception of the whole rather than a focus on detail of the parts.[403] The baptistery – and entrance – are, again, off-centre from the principal central axis that the short aisle follows. The baptistery itself was conceived as a small space terminating in a hemispherical wall, and topped by a steep monopitch roof. Once again, light is admitted indirectly towards the baptismal font from a vertical panel of glazing that faces the church. Above the monopitch, steeply-angled parapets continue the baptistery enclosure upwards. Above the ridge of the monopitch facing the church, no solid wall existed; just three horizontal bars which spanned the void, supporting a cross.

The entrance front to the main church – the narrow end of the wedge – retained something of the fenestration type of St. Martin's and St. Mary of the Angels, but there was much less of it. A narrow vertical slot appeared as a gash in the masonry, which obliterated the parapet of the wall, lighting the gallery inside. Further down, a horizontal slot window with a short vertical stub off-centre to the main horizontal opening, seemed to point towards the glazed entrance. However, it is at the sharply-angled side walls that the most development of this model seems to have taken place. Whereas previously at St. Martin's there had been a variety of windows which had been angled in order to train light onto the altar, at St. Mary's, this evolved into a series of eleven, completely detached, white-rendered piers, orthogonal to both the entrance façade and to the sanctuary façade, rather than to the implied angle of the side walls. Between each pier, a narrow floor to ceiling sliver of glazing allows unidirectional light to fall on the wide end of the church, and hence onto the sanctuary and altar. This use of stepped orthogonal piers with glazing between was used by Barry Byrne at Christ the King, Turner's Cross,

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[402] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson., p. 75.

[403] Ibid.

Cork in 1927, so was not wholly new, but neither had it been widely seen in ecclesiastical design previously. The sanctuary is expressed – as had been the case with both St. Martin's and St. Paul's – as an apse; though in each case, they varied in perceived height and form. St. Mary's, as St. Paul's, were designed to rise to a not insignificant degree above the level of the main roof in order to draw in light indirectly through a clerestorey; washing over the angle of the monopitch of the apse, and indirectly illuminating the altar below. The siginificantly larger St. Martin's, employed a flat-roofed apse which also rises above the level of the main roof composed of rows of rooflights within its trussed structure, but the copper-clad roofs of the lateral angled 'wings' connect to the apse roof so that its height appears to rise gradually by the ascent of the copper-clad roofs. At St. Paul's, the apse is simply a rectangular volume with a monopitch roof; at St. Martin's it appears as a flat-topped hemispherical volume, whilst at St. Mary's, it was somewhere between the two, with a monopitched rectangle, with outer wall moulded into a very shallow, flattened curve. A cross is placed centrally, this time, above the apse, fixed to the roof edge of the clerestorey.

The roof of the glazed link that connects baptistery with church continues into the church itself and forms the floor of the gallery, which would have surmounted the confessionals and other, ancillary accommodation. There was no narthex as such, instead, the glazed link was treated as the transitional space before entering the main liturgical area. Confessionals here, as at St. Paul's and St. Martin's, were placed near the entrance rather than along the side walls.

St. Bride's, East Kilbride 1963

St.Bride's, East Kilbride (1963), Gillespie, Kidd & Coia. Source: The Glasgow School of Art (no date).

Of all of the firm's late-phase churches, St. Bride's, East Kilbride is justifiably one of the most renowned – and one of the largest. Built on a steeply banked green site between Whitemoss Avenue and Platthorn Drive, in Scotland's first New Town, the massive red brick sculptural bulk of the church and peripheral elements (campanile, sacristy and presbytery), would have had a considerable impact over the surrounding residential areas. Of all of the firm's churches to date, St. Bride's pursues a narrative of journey and experience most intently. Although not a tremendously large site for the great masonry mass of the church, the sense of experience on entering is enhanced by virtue of both its elevation and linking of architectural and landscaped components. Originally, visitors would have entered the domain of the church by way of a flight of steps passing between

the presbytery and the 27m high brick campanile.[404] At the top of the steps, a paved courtyard referred to as a 'piazza' by Rogerson,[405] with a radial design converging on the main entrance to the church, creates a sense of serene enclosure before entering the edifice on which it is centred. The church itself is orientated north-south; with the entrance actually occurring on the west wall, and the sanctuary at the southern end.

The presbytery and ancillary building (housing sacristy and guild room) connected to the church are conspicuously contrasting in scale to the church itself, though similarly employ the use of reddish brickwork. The presbytery, by way of its connected wings of accommodation, steps up the sloping site – a series of terraces, almost – with flat roofs, and glazing arranged in a continuous clerestorey ribbon, causing the copper-clad roof to levitate lightly over the top. Below this, the accommodation of the main entry level is differentiated from the clerestorey by a slight projection on all sides of the building. Fenestration below that adopts a similar mode of execution as at recent works, such as St. Mary of the Angels and St. Martins. However, here the glazing units are smaller and almost flush with the brickwork façade, rather than recessed; but rather than seeming staid and flat, the roughness and unevenness of the brickwork imbues a surprising degree of interest and tactility. Again, there is no discernible pattern of placement, except that they become horizontal and ribbon-like where used for significant spaces such as the priest's suite on the west side, which faces away from the piazza. Elsewhere, patterns of glazing on the house seem to echo the varying vertical and horizontal emphases of the brick walls of the main church building; framed further by the cardinal emphases of the (demolished) vertical campanile and lowly horizontality of the presbytery itself.

The arresting bulk of the church is inspiring, and although much discussion has already been accorded to its manipulation and communion of light, structure and enclosure, fresh appraisal is worthwhile in relation to its position within the lineage of the firm's ecclesiastical work. It is a large, windowless brick box on its periphery, but it is far from uninteresting. The massive, cliff-like brick walls with striking variation in both tone and surface texture, seem to elevate them into a geological colossus bursting from the

[404] The campanile no longer exists – it was demolished in 1983 owing to 'defective' brickwork. See RCAHMS (no date) *East Kilbride, Whitemoss Avenue, St. Bride's Roman Catholic Church.* [Online] [Accessed on 26th January 2014] http://canmore.rcahms.gov.uk/en/site/120299/details/east+kilbride+whitemoss+avenue+st+bride+s+roman+catholic+church/

[405] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson., pp. 76-9.

hillside; the vertical chasm of the entrance only intensifying this experience. On the principal (west) front, a row of narrow vertical indentations demarcate what would, at previous churches, have been clerestorey glazing. From a distance, these would have resonated like a wave from the massive punctuating counterpoint of the campanile at the northern end of the complex. At ground level, though the scale is almost monstrous from the courtyard, visitors are drawn to the sheer, dark scar of the entrance – seemingly at odds with any liturgical need to draw in the faithful – yet in almost divine contraposition to the manipulated light of the interior. Apart from the convergence of the brick paving at this largely concealed entrance, the only other humanly-scaled feature occurs with the dematerialisation of the corner at ground-storey level, on the north side of the vertical entrance gap. It is sculpted into staggered columns of brickwork, the vertically stacked headers forming a diagonally chamfered corner to the thick mass of the wall. Above, the bricks are imaginatively corbelled out to reconcile the diagonal chamfer at ground level with the orthogonal corner above. This is in contrast to the gentle curve and folding in of the wall on the south side of the opening. The north wall inspires similar awe in its sheer brickwork face; though this time, detail is provided in high relief – described as 'abstracted ivy' by Gordon Benson,[406] and designed to respond to a cluster of nearby trees. The design is apparently unrationalised – which is part of its allure. Bricks are turned 45 degrees in vertical lines, which sometimes extend to almost the height of the building. Sometimes a ladder detail is achieved by the placement of stretchers in alternate courses, between the angled bricks; and in other instances the angled brickwork exists in much shorter clusters in random configurations. All of this is very finely crafted and imaginative, but it is a development of similar experimentation into the tactility and aesthetic quality of brickwork, which began as far back as St. Patrick's, Greenock, in 1935, and occurring again at St. Peter-in-Chains, Ardrossan, in 1938. This preoccupation of detail to brick craftsmanship would also extend to the construction of Robinson College, Cambridge, in 1980.

The north front reveals further celebration of mundane or ubiquitous architectural elements. The downpipes are arranged as a deliberate and very obvious part of the composition of this façade – five square-section pipes, equally spaced and unrelated to any rhythm or pattern on the brickwork, march across the wall, emerging from large rectangular hoppers at the bottom of the parapet of the concealed roof behind. The great east wall displays a similar concern in its dynamic tactility – unsurprising given such an expanse of unrelieved masonry. This time, however, the detail is horizontal, as opposed

[406] Benson, G. J. (2007) 'Sources, ideas and lessons.' *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987.* Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City, p. 43.

to the vertical detailing of the other three facades. Benson states that the apparently arbitrary lines of recessed and protruding brickwork are suggestive of clouds,[407] originally with a cross set in a niche at the northern end of the wall, indented into the parapet wall, marking the position of the new town. Where they are recessed, individual bricks are turned through 45 degrees, creating long, horizontal, rippling gouges in the surface of the wall. Where they protrude – towards the north end of the east wall – it is as if they have pierced the wall surface through long, thin slits. The effect, then, of shadows cast on the wall surface due to their dislocation from it, is quite magnificent and casts an abstract quality to an already richly crafted façade. The shorter south wall represents further variation in wall treatment; equally devoid of fenestration, but without the surface manipulation of the north and east facades. Instead, five vertical emphases at clerestorey level once again appear; however, they are at this point slots within the parapet as opposed to mere indentations, as they are in the adjacent west wall. The thickness of the wall is made apparent by the staggered, recessed brickwork along the top and west side of each slot, making the actual void of the slot off-centre. Square-section downpipes again descend from oblong hoppers, which are fed from roof drainage by way of the five parapet slots.

Entering the church, one of the most striking elements is the deliberate spatial manipulation of the visitor, beginning with lateral entry into the church. Entering, the narthex receives the visitor, but it is very much a space of re-orientation and for making choices. Rather than being situated below the gallery, as is usually the case in the firm's churches, at St. Bride's it is to the east of the narthex, where it occupies the virtual length of the building, from north to south. Directly ahead, the baptismal font occupies a space defined only by a change in level within the north-west corner of the building. In fact, it could be said that the western portion of the church, between the north and south walls, houses all of the liturgical accommodation which could be said to be – although important – peripheral to the dominant liturgical space for the celebration of the mass. Continuing under the gallery, the confessionals – rather than being discreetly arranged either at the back or sides of the building – seem to confront the visitor. Their position between the entrance to the building and the pews facing the high altar, imply a barrier despite access to the pews being possible around them and between the first two and the subsequent four. Turning right and facing south, the sanctuary at the south end becomes visible. Continuing, a curved staircase giving access to the gallery above, disappears into a fold in the brick wall to the west, and south of this are situated the Mortuary chapel and Lady

[407] Benson, G. (2007) 'Sources, ideas and lessons.' *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987*. Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City, p.43.

altar, and access to the sacristy. By this point in the experience, the principal liturgical space has become visible and accessible through the vertical supports of the gallery. Descending the two steps into the main liturgical space of the nave, pews are arranged asymmetrically and unevenly, with those to the east of the aisle being longer than those to the west. Although the main north-south aisle is on axis with the high altar, the altar itself is eccentric to both the width of the nave and to the width of the church overall (encompassing the 'peripheral' space on the west side). A transverse axis incorporates an east-west aisle with the gap in the arrangement of the confessionals and the entrance. This secondary axis does not so much terminate as change direction, colliding with the east wall and folding upwards and dissolving into a strategically placed 'light chimney'.[408] Eventually, it is possible to arrive at an examination of the complex building envelope – so central to the experience of this unusual building. Whilst relatively little is given away externally, the inside of the great east wall is perforated by a constellation of differently-dimensioned orthogonal apertures; some simply acting as recesses and others as light chimneys, allowing light to cascade down into the interior at different levels, from openings at parapet level. The cills of these openings are canted as if to allow the light to literally spill out into the church. These are, in effect, the windows; but with only indirect illumination. None of the other walls possess apertures; the only other means of illumination emanating from above, filtering through a timber lattice ceiling structure from west-facing glazing in the roof trusses above and east and west-facing light cannons. Another opening reveals a narrow stair that coils almost into the thickness of the inner and outer leaves of the wall, the outer leaf only bowing out subtly to accommodate it. At the top, the stair emerges onto a small balcony overlooking the nave – in fact, the pulpit – which seems to unfold organically from the great west wall. The high altar is marked by both indirect roof lighting, and by a simple bulge in the brick wall behind it, at ground level. All four massive external walls are double-skin, and are all load-bearing.

[408] Ibid., p.43.

St. Patrick's, Kilsyth 1964

St.Patrick's Kilsyth, (1964), Gillespie, Kidd & Coia. Source: The Glasgow School of Art (no date).

St. Patrick's, Kilsyth (1964) belongs to the model developed at St. Bride's, where the brick box relies on a sense of promenade or discovery to describe its liturgical function, rather than an obvious visual progression towards the sanctuary, largely as a product of footprint and layout (and usually in variations on a basilican plan type). It does, however, represent something of a deconstruction of the solid mass of St. Bride's; akin to the more abstract separation of the solid planar elements such as walls and roof from each other

through glazing.

The church is orientated north-east / south-west on a small sloping site in Kilsyth, north-east of the Glasgow conurbation, and this change of level is incorporated into its strong sense of promenade. Both St. Patrick's and St. Bride's use this sense of artifice to create a build-up of anticipation and sense of experience, but whereas at St. Bride's this is created by the manipulation of the visitor substantially on one level, at St. Patrick's, this is achieved by multiple changes in level. Both, however, employ a similar sense of implied (rather than physical) separation between nave and peripheral functions (which are again contained within a narrow oblong portion of the building along the entrance façade).

Externally, the north-east entrance façade addresses Low Craigends squarely behind a paved forecourt. Here, there is not the same sense of arrival as exists at St. Bride's – the entrance at St. Patrick's is indicated by a vertical break in the façade and a recessed plane of glazing to clerestorey level. To the east of the main entrance, a plain reddish brick wall appears as a projecting plane, framed by the glazing of the entrance slot, clerestorey, and further vertical shaft of glazing at the east end of the main façade, separating it from the south-east wall. The artistry demonstrated in the high-relief brickwork at St. Bride's is absent at St. Patrick's, the courses being laid in simple stretcher bond. However, the north-east wall is fractured and jettied out at gallery level by an arcaded concrete vault, which is also the floor structure of the gallery. At ground level on this north-eastern side of the building, a projecting brick bay, with simple lean-to roof and a very narrow band of glazing beneath this, indicates the Mortuary Chapel within; and to the east of this, giving onto a meeting room inside, are four brick oriels, with angular corbelled brickwork supporting their projection from the main façade. Their angled, glazed roofs continue the firm's preoccupation with indirect, overhead lighting. To the west of the entrance shaft, a massive plain brick wall with rounded corners, envelopes the baptistery. Above these numerous façade components, a horizontal strip of clerestorey glazing extends the length of the façade, and thereafter forms a continuous ribbon of high-level glazing around the perimeter of the church. Surmounting the clerestorey, a great, billowing angled, lid-like roof structure composed of steel girders clad in copper,[409] hovers above, the reflections in the glazing seeming to create an

[409] Rodger, J. (2007) 'Selected works.' *In* Rodger, J. (ed.) *Gillespie, Kidd & Coia Architecture 1956-1987.* Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City., p. 119.

illusion of a near absence of supporting structure. The north-west and south-east walls are notably blind, save for the clerestorey glazing and a slit-like vertical window, deeply recessed and allowing focused light onto the baptismal font on the north-west wall. The other significant elevation is at the south-west, which also faces a courtyard area. There is, therefore, for the first time a degree of ambiguity in terms of the church's principal façade. This elevation is even further deconstructed, almost appearing as though the glazing were the principal plane of the wall and the brickwork secondary. The brickwork elements appear as five vertical panels; the first four being identically dimensioned, the function of which shall be revealed presently. The fifth is a great deal wider. These are, in reality, more akin to angled brick tubes containing a niche for a shrine, two confessionals each, and a stair, in the first; second, third and fourth; and fifth, respectively. They have the appearance of thick masonry structure that has been hollowed out to house these elements. From the western end of this façade, a vertical glazed shaft bearing another entrance is recessed by almost the depth of these vertical brick tubes; thereafter, narrower glazed slots that rise from ground to clerestorey, set up an alternating rhythm between the first three equally-dimensioned brick elements. The glazed slots between the third and fourth, and the fourth and the wider brick element are themselves slightly wider, and adjacent to this is a very narrow strip of vertical glazing that connects to a wall which returns at 90 degrees, enveloping the Lady Altar within. Between this and the monolithic south-east wall, a further recessed, vertically-orientated wall of glass admits light to the sanctuary, behind the High Altar.

There is a complicated sense of discovery internally, a convoluted sense of arrival which is sharply contrasted by the vast, orthogonal nave. The visitor enters above the level of the main liturgical space, and takes a pathway to it either via the baptistery at the north-west corner of the building, or alternatively emerging close to the sanctuary. As the building faces onto courtyards both at the front and back, an alternative entrance allows access straight into the back of the nave from the south-west wall. The sense of light in St. Patrick's is less sublime than at St. Bride's, as it is more constant, owing to the clerestorey glazing that encircles the church's entire periphery, and the substantial areas of floor to ceiling wall glazing. More abstracted lighting percolates down the 'light chimneys' on the north-west wall, illuminating the long gallery above the nave, and a light cannon casts illumination onto the High Altar from above. Apart from this device within the roof, the roof itself seems less integrated into the internal experience. Yet this very separation is part of its aesthetic – the narrow band of clerestorey glazing seemingly undertaking the Herculean feat of supporting the massive, deep roof structure. The horizontal line of concrete arcaded vaulting of the exterior, is repeated internally, forming the floor of the gallery space.

The nave, again, comprises an eccentric axis to the High Altar, creating unequal areas of seating (for 700) on either side of the single aisle. Ambulatory space encircles the nave, permitting lateral access on both sides, and giving access to the confessionals, which adopt the earlier, more discreet position adjacent to the nave, but here are conceived as pockets of space within a deep external wall.

St. Joseph's, Faifley 1964

St.Joseph's, Faifley, (1964), Gillespie, Kidd & Coia. Source: The Glasgow School of Art (no date).

The original St. Joseph's, Faifley, disappeared in a conflagration in 1993.[410] The

[410] MacDonald, C. (1993) 'Firefighters battle in vain to save church,' *Herald Scotland*. [Online]2 0th December [Accessed on 28th February 2014] http://www.heraldscotland.com/sport/spl/aberdeen/firefighters-battle-in-vain-to-save-church-1.727690

current building is therefore a replacement, designed by Jacobsen and French, opening in 1997.[411] Had it survived, it would have been the first example of a form and layout that were no longer based on the basilican nature of a nave with forward-facing seating (even the wedge-shaped St. Paul's and St. Mary's were essentially variations on the basilican model).

The original St. Joseph's was effectively a brick and timber cube, forming the central focus of a small complex of associated buildings around a courtyard on a large green site in the residential suburb of Faifley on the north-eastern periphery of Glasgow. A 'piazza' area in the space between the church, church hall and presbytery[412] formed a paved ante-space on approach to the main entrance to the church. The use of ceremonial external space can be seen both in the more recent churches, such as St. Bride's and St. Patrick's, where the experience is intended to manifest itself in the form of an architectural promenade. In the 1950s cluster it is seen in such examples as St. Charles Borromeo and Holy Family, where abstraction of the different programmatic elements of the church create interesting external space, and in the garden spaces of St. Anne's and St. Patrick's, with a moment of emphasis on the articulation of the connection between church and presbytery.

The new church follows the approximate footprint of the former building; being orientated with the sanctuary at the north-west and the entrance at the south-east. More compact than the large brick orthogonal churches of St. Bride's and St. Patrick's, St. Joseph's nevertheless had a significant presence on its site. Walls were of plain stretcher-bond brickwork and lacking the detailing of St. Bride's, but their uneven colouring lent a dynamic quality to their massiveness, and the section of the building was much more restless than the monolithic, orthogonal brick planes with uniformly horizontal parapets of St. Bride's. The logic and legibility of St. Joseph's is appealing; the main body of the church was described by two monopitch roofs; the lower, shallower roof and the higher, more steeply-angled roof reconciled by a south-east facing clerestorey, casting light onto the sanctuary. On the entrance side of the church, the Lady Chapel and baptistery employ a similar monopitched roof; this time with a north-east facing clerestorey, illuminating even these peripheral spaces from above. The main entrance was set in

[411] Scotland's Churches Trust (no date) *St. Joseph's, Faifley, Clydebank* [Online] [Accessed on 28th February 2014] http://www.scotlandschurchestrust.org.uk/church/st-josephs-faifley-clydebank

[412] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson. , p.83.

between these two peripheral zones; a lowered, recessed, glazed zone approached by a short flight of steps from the piazza. The baptistery was conceived as a tall rectangular volume with a hemispherical end – a device used also at St. Charles Borromeo, and originally at the Roman Catholic Pavilion. It had no fenestration other than that of the clerestorey. The Lady Chapel was a similarly tall volume of space, though this time the long sides of the rectangle were tapered towards the hemispherical end, which this time protruded just beyond the north-east (side) elevation.

The extant church hall and presbytery display a similar language of plain, blocky, opposing angled monopitch volumes placed against each other in order to create bands of high-level lighting. The principal presbytery facade has remnants of the panelised relationship of fenestration to brick wall that was explored at St. Mary of the Angels and St. Martin's, but has an altogether sparer aesthetic, in contrast to the former church. In reality it is almost exhausted of significant features. Windows are expressed in either vertical configurations of either one, two or three modules in a brick-clad oblong with monopitch gables with parapets; and a profiled monopitch roof is held in between.

As mentioned, the former church was organised around a square plan. Having ascended the short flight of steps, passing through a narthex positioned between the baptistery and Lady Chapel, the visitor enters the church on a significantly off-centre axis. This allows for a smaller square of orientational space in the south corner of the building. From here, the space rises up to the baptistery to the south to a row of three confessionals against the south-west wall, a rear axis connecting to a secondary entrance on the north-east wall, and north-west down the principal axis and main processional aisle. The sanctuary, rather than being the focus of the principal axis, is here the focus of the space as a whole, taking an almost central position within the square. Three banks of pews address the square-form sanctuary from three sides. It is interesting how the liturgical focus of the building is now defined only by a simple square dais and square baldacchino, simply suspended from the angled timber roof beams. Behind the sanctuary, the narrow oblong sacristy inhabited the length of the north-west wall, defined only by a wall between it and the church. It did not rise to meet the ceiling, nor did it have a ceiling; rather, it was treated as a partially connected volume, with the angled ceiling of the main liturgical space oversailing it to meet the external north-west wall. The two were reconciled by a very narrow band of glazing, which would have had the effect of backlighting the sanctuary (in addition to the high-level lighting from the opposite side, by means of the clerestorey glazing at the interface of the monopitch volumes. On the sacristy wall, on axis with the sanctuary, was a large niche with angled sides and a rear wall parallel to the

sanctuary. Rather like a vestigial apse, the niche gives some contextual focus to what would otherwise be an entirely blank rear wall. The canted sides of the niche are composed of narrow slivers of glazing held in timber frames. This vertical rhythm executed in timber was continued along the rear wall of the niche in front of its solid wall, imparting visual contrast to the simple tabernacle within the space of the niche on front. Although this entire arrangement makes perfect sense from the church side of the sacristy, within the sacristy itself, the pinching of space in the middle of an already narrow space, seems a little unsatisfactory. On the north-east wall, a further confessional was tucked into a space beside the secondary entrance, indicating no particular hierarchy within the building, and their discreet lateral placement certainly did not have the confrontational quality of those at St. Bride's. The sunken Lady Chapel, quite beautifully expressed in its subordination to the main church space, being lower both at floor level and in submissive dialogue at roof level. The baptistery is at once ascended from the floor level of the church, *and* submissive at roof level.

Sacred Heart, Cumbernauld 1964

Sacred Heart, Cumbernauld is largely a variation on a mode of design that had been seen at St. Bride's, St. Patrick's and St. Joseph's – all built during the same year. However, although all four churches explore the idea of a concealment of programme and structure – bound up in a massive, cubic, planar envelope; for the first time at Sacred Heart, this concealment extends to both the external and internal aesthetic of the wall surfaces. These now, rather than celebrating the tactile and visual diversity of brickwork as both a functional and inherently visual material, are enveloped in pale-coloured render; smooth on the outside and roughcast internally.[413] This could be seen to be, in part, a response to the aesthetic context of Cumbernauld, but also it was a further evolution of the firm's repertoire, where they alternated between facing brick and render in the last decade of their ecclesiastical work.

Sacred Heart is situated on a large, undistinguished site amidst the housing estates of the new town of Cumbernauld. It is in fact orientated north-south, with the principal axis on the diagonal of what is effectively a large, more or less squarely-planned building. Entrance is via the north end, which is chamfered from the main square form of the

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[413] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson., p. 81. The author did not feel that the roughcast was sufficiently textured 'to give the required effect'.

church. It has no particularly dignified approach; the entrance addressing a car park to the north-west, and an open green area to the north-east. Ambiguous or indeed absent, is any notion of revelatory promenade. However, it is still a hugely curious edifice; the sense of solidity and weight expressed by the deeply recessed entrance on the angle, surmounted by a substantial band of render in a darker shade, suggestive of a very large lintel to support the monolithic character of the blank wall above. As the façade transitions into the north-east front, it bulges out into a shallow bay with angled sides. This modulates what is effectively the principal elevation, which is completely devoid of fenestration. It also contains within it the choir gallery, and in pulling away from the principal volume, it creates a roof-level slot, which continues the firm's preoccupation with concealed and indirect lighting to invoke a specific experience inside the building. Beyond this, the wall is blind save for a cross, mounted towards the parapet. On the north-west wall, a dynamic series of recessed windows of coloured glass– vertical apertures of varying height – break through the wall and reveal its thickness. Again, the remainder of this façade is unrelieved plain render. The south-east façade talks a similar language, except here, the glazing elements are not so extensive, in deference to the sanctuary in the church's south corner. To the south-west is grouped all of the ancillary accommodation, including a hall, Lady Chapel, baptistery, sacristy, office and shop.[414] A large two-storey presbytery extends to the north-west, beyond the north-west façade of the main church building. The ancillary block and presbytery are undifferentiated from the church in external finish and aesthetic, much like the majority of the firm's ecclesiastical work. Still evident and continuing a pattern from the preceding early 1960s cluster, the fenestration of the presbytery is the dominant feature of an otherwise sparsely detailed exterior. This time, however, the irregularly placed windows interact with panels of painted render rather than brickwork.

Internally, the cave-like space is dramatic, appearing as a great square cavern with rough-cast walls, and a timber ceiling – and heavily shaded, save for the multi-hued light cast by the irregularly patterned *dalles de verre* glazing on opposite sides of the building. Entering at the angled north corner, the narthex is reduced to a small transitional space enveloped by a timber screen. Passing through this, the visitor is on a diagonal axis with the sanctuary, around which seating is arranged in four sections around the altar in the south corner; the pews being set out neither in basilican nor truly centralised arrangement. The timber screen continues internally along the north-east wall, breaking to allow a narrow staircase to wind up to a choir gallery, and angling out in an inverted

[414] Ibid.

mirroring of the external bay (though it is offset to the south). This band of timber forms a base for the organ pipes, which are similarly in an angled, three-sided arrangement. Other sources of light filter down from the roof, further adding to the church's cave-like character. As previously mentioned, this occurs above the choir gallery near to the entrance, but it also occurs elsewhere, for example demarcating the altar and sanctuary, where light is admitted from a rooflight, and through a timber lattice screen with deep square voids – the timber frames of which extend downwards to differing depths. The singularity of the space was evidently important, and manipulation and inhabitation of walls and ceiling for both functional and ambient reasons is a continuing concern here.

Our Lady of Good Counsel, Dennistoun 1965

Our Lady of Good Counsel, Glasgow (1965), Gillespie, Kidd & Coia. Source: Author (2007).

Our Lady of Good Counsel, Dennistoun, Glasgow is situated on a small urban site in Glasgow's East End; one of the firm's last churches and just a stone's throw from the first. Orientated north-south, with the primary entrance at the south end and sanctuary at the north, this church represents a return to a desire to evoke a sense of discovery

generated by the notion of 'promenade'.[415] It seems, contrarily, both obscure and clear in this regard; the low east wall seeming insignificant below the great mass of copper-clad monopitched roof - itself more façade than roof here – yet the main entrance penetrates the south end of this wall, and beyond the doors, a purposeful wall only gradually reveals the interior on entry. The monopitch of the east side of the building rises steeply, spanning the width of the main liturgical space before dropping into a dramatic, vertical clerestorey space. Ancillary spaces are grouped into a secondary zone, lateral to the primary. The arrangement is such that the cross-section created by the arrangement of the roof, is exceedingly bold, and somewhat illustrative of the architects' intentions with regard to light and structure. It also introduces the first in a late trio of churches, which use daring roof structures to explore the effects of lighting on internal space.

The entrance façade, then, is both wall and roof. The east wall is a plain, low buff brick band with a narrow strip of glazing between it and the copper-clad roof. Dynamism is generated by the perspective created by the standing seams of the roof, and by the seemingly arbitrary positioning of the expressed mullions rippling along the horizontally-orientated glazing. The whole of the east side is grounded on a plinth of shallow steps. At the north end, these rise externally to a secondary entrance, the steps extending along the main east wall as well as on direct axis with the entrance, in a quasi-pyramidal fashion. At the opposite end of the east elevation, oddly, a more discreet entrance contrasts completely with the first. This is the main entrance insomuch as it is the beginning of an experience. Beyond the two sets of double doors is a flight of steps which rise to the level of the main liturgical space, and flank a wall, which prevents an immediately direct view into the church, though this appears towards the top of the steps as the wall terminates just above the level of the handrail. Both entrances are flanked on their extremities by loadbearing brick diaphragm walls. That of the main entrance is designed such that its inner leaf changes angle to align perpendicularly with the internal space. The external leaf is angled with the southern boundary of the site. At both entrances, the diaphragm walls are angled – ziggurat-like – in deference to the entrance openings. The north, south and west walls are treated in a similar fashion to the east; plain buff brickwork and copper-clad roofing. On the west façade, once again, the towering presence of copper cladding speaks more of a façade than a roof, especially due to the vertical face that supports the monopitch on the east side. Here, the ridgeline rises to the north and hence the sanctuary inside. Within the copper cladding are randomly-distributed small glazed apertures with very small horizontally-orientated

[415] Baines, M. (2007) 'Plan and promenade.' *In* Rodger. J (ed.) *Gillespie, Kidd & Coia: Architecture 1956-1987*. Glasgow: RIAS in partnership with The Lighthouse, Scotland's Centre for Architecture, Design and the City, pp. 49-69.

rectangular openings toward the ridgeline, and larger, vertically-orientated apertures beneath. Below this vertical section of roof structure, a secondary monopitched roof-structure encloses ancillary accommodation within. This arrangement can be seen as a development of that of St. Joseph's, Faifley; where ancillary spaces are expressed as a similar but subordinate envelope, in comparison to the principal structure. A band of roof glazing separates the vertical section of roof from the lower monopitch, however, such that a slash of daylight demarcates nave from peripheral space. A small copper-clad light chimney marks the position of an entrance into the side chapel from the exterior. The west face of this small structure is clad in such a way that a cross is formed from the placement of the copper sheets. A sculptural cross then surmounts this – typically asymmetrically.

Inside, having ascended the steps behind the main entrance, the next step in the liturgical promenade is the baptistery, where the visitor arrives, the font being on axis with the entrance steps. Arrival is, therefore within the ancillary portion of space to the west side of the building, and below the lower monopitched roof. Other accommodation within this secondary zone consists of the sacristies, confessionals and side chapel. As at St. Joseph's, there is a disjunction between the external representation of the dominant and the subordinate. This disjunction also exists in the internal expression of space, where some of the ancillary functions are simply volumes within a greater volume. Enclosed by a brick wall with rounded corners, the confessionals do not meet the roof, allowing its clear, unbroken angled plane to sweep overhead, from south to north. Instead, a small curved stair gives access to a choir gallery above, backed by a wall that does reach the ceiling – this being the only element which is completely separated volumetrically from the main liturgical space – and housing the sacristies. The Lady Chapel beyond is even less defined than the confessionals, being essentially open to the nave, and only defined by a small change in floor level. The larger volume of the church is defined not only by its higher ceiling level, but also by the six massive, diverging concrete columns that support the great roof. The nave is therefore wedge-shaped, and as at St. Paul's, Glenrothes; and St. Mary's, Bo'ness; the wide end of the wedge housing the sanctuary. A broad ambulatory space gives access from the entrance end to the seating, and to the aisle on axis with the altar. Seating is laid out in an uncomplicated arrangement, with a forward-facing bank of pews on either side of the aisle (the block of pews on the east side is wider than those on the west). A further, much smaller bank of seating faces the sanctuary from the east wall, making sense of the wide north end of the building, and altering the axiality of the layout. The focus of this arrangement is the sanctuary – yet here, it is really for the first time, substantially free from very obvious architectural devices that indicate that it is so – the great north wall, in its sharply angled relief, seems statement enough. A constellation of multi-tonal

brickwork – laid in stretcher bond with the occasional soldier course – provides a strangely mesmerising framework for the altar. That this is a diaphragm wall further enhances its richness in terms of material depth. Although it lacks apertures, the simple sanctuary is demarcated by a stepped, vertical indentation on either side of the altar. A niche for the tabernacle is described in a similar way and, towards the apex of the wall, three paired, vertical, decorative indentations in the brickwork re-use a similar feature to that seen at St. Bride's. The Lady Altar appropriates a similar craftsmanlike language; however, on the west side of the altar, the wall is described by an angle which steps away from the dominant plane of the gable wall, creating a point-like corner, in reflection of those of the entrances on the east wall. The main altar itself is further accentuated by virtue of its stepped elevation within the sanctuary, and by a simple cantilevered baldacchino above.

Light, as ever, is a central concern within this church. The grotto-like interior of Sacred Heart occurs again at Our Lady of Good Counsel. It is characteristically controlled, beginning with the back-lighting of the baptismal font at the top of the entrance steps, and strong illumination featuring also in the sacristy and side chapel. The nave is contrastingly shadowy as it rises to the apex of its roof, but this principal volume is rent by the great slash of roof glazing along the top of the lower monopitch. Deep timber beams are revealed that anchor it to the main beam that spans north-south along the length of the main liturgical space, emphasising the pale, board-marked concrete of the substantial columns that support the roof structure, and just penetrating far enough to fall subtlely over the altar steps. The glazing bars of the rooflight create a curtain, seemingly made of shafts of light interspersed with shafts of darkness – and create a transient yet powerful separation between the different spaces. The small light chimney along the west façade also creates odd lighting effects on the angled ceiling as it interacts with the brick curve of the gallery stair. On the east side, the narrower, lower strip of clerestorey glazing highlights the edge of the altar, and in the vertical copper-clad element of the west façade, the small apertures in the metal filter through the internal timber lath cladding, creating small diffuse areas of light within the roof volume.

St. Benedict's, Easterhouse 1965

St.Benedict’s, Easterhouse (1965), Gillespie, Kidd & Coia. Source: The Glasgow School of Art GKC_CHE_2_1_1 (no date).

St. Benedict’s, Easterhouse, Glasgow is situated in the eponymous post-war estate, to the east of Glasgow, and on the periphery of the greater conurbation. It is set within a largely residential area, on a large green site, and is orientated north-east, south-west, with the main entrance to the south-west.

It marks a degree of resolution to many of the preoccupations that had interested the firm in the preceding years, including a centralising purity of layout that seems to be

achieved by the relatively few constraints of site, and hence building form. The building is essentially a rectangle, and is again treated as conjoined volumes featuring two monopitch roof structures – one higher than the other. This time, however, the join in the two volumes is central to the main liturgical space. The entrance is at the lowest edge of the lower monopitched volume, and effectively forms part of the ancillary zone. In contrast to Our Lady of Good Counsel, less emphasis is placed on a build-up of experience; beyond the entrance vestibule, the visitor has a full view of the 'nave'; albeit one that is off-centre.

Access to the site is directly from Westerhouse Road, with a paved area described as a 'piazza' by Rogerson,[416] accessed via a short flight of steps from the pavement, which stretches along its width; lawns flanking this arrangement on either side. In contrast to Our Lady of Good Counsel, more emphasis is placed on the primary façade and, being ~~part of the lower volume, the~~ roof leading up to the clerestorey should, again, be considered part of its composition. The main south-west façade, like the rest of the building, is rendered rough-cast brickwork. The timber main entrance doors mark the lowest point on the elevation, and on either side, elevated volumes exceed the height of that of the roof over the entrance, themselves providing the opportunity for indirect overhead lighting by way of their own clerestoreys. The arbitrary placement of window apertures returns from use at previous designs, with high-level square windows and a low-level narrow longitudinal element, and similar but shorter horizontal lights above the entrance doors. A series of five very narrow vertical slot windows gives onto a peripheral zone within. The positioning of the raised 'gables' of the elevated volumes on either side of the entrance, coupled with the random spacing and width of the mullions to the clerestorey, create a lively elevation which alters according to perspective. Elsewhere, the external walls are similarly coated in rough-cast, but feature slim, closely-spaced buttresses that extend the length of the north-east (back), south-east (side), and north-west (side) facades. The buttresses themselves contribute to the dynamism of the elevations at this church. Each features either three or four steps, with the height of each respective step increasing as the ridge line of each monoptich rises. The whole produces a palette of light, shadow and dark horizontal flecks, generated by the edge of the angled flashing on each step. Once again, the very distinct sectional characteristic of the church contributes to its legibility; a concern that became ever pressing in the evolution of the firm.

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[416] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson., p.83.

An attached presbytery faces the road and forms part of the composition by echoing the language of the church. It also reconciles a level difference between the front and back of the site in a similar way to the church, whereby the back of the building drops away to reveal three storeys, in contrast to the single storey facing the Westerhouse Road. Sectionally, the presbytery acknowledges the church, particularly in the long clerestorey glazing formed between two monopitches, also facing the road. The front façade of the presbytery uses a familiar fenestration formula featuring a narrow clerestorey slot between the top of the wall and roof eaves, periodically descending to form larger apertures according to internal use. The rear façade is treated in a similar way, and the gable ends, rather than the buttresses necessary to support the structure of the church, conversely are (particularly the south-east façade) punctured with oblong windows in a seemingly random arrangement. The rear of the presbytery is formed by a similarly steeply pitched roof to that of the church, but here the internal requirements generate two-thirds the volume of the church, represented by the horizontal roof divisions. In order to avoid an unnecessarily deep floor plan, a narrow courtyard is cut out of the rear monopitched volume, allowing light deeper into the interior of the house.

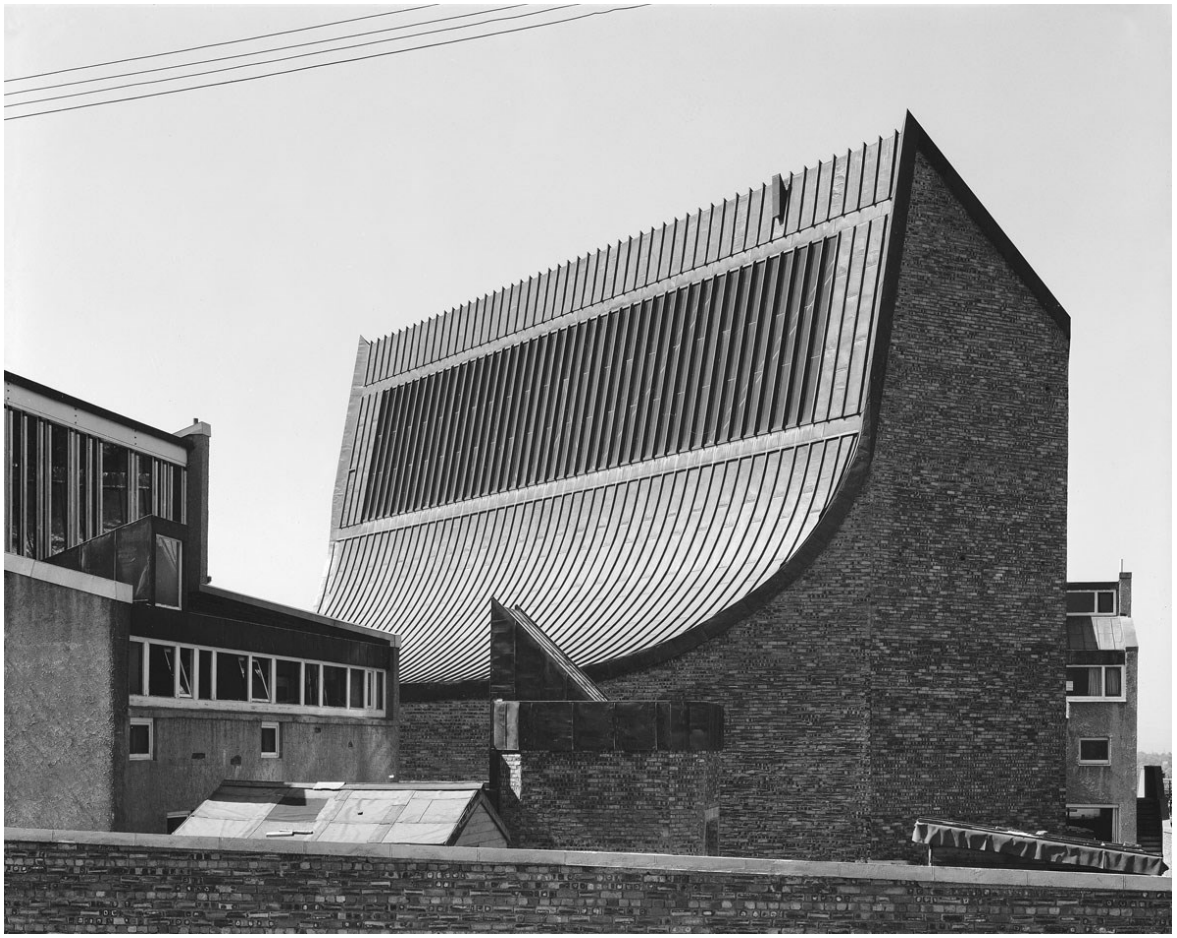
The church is somewhat altered from its original state, having undergone a programme of restoration and renovation in 2004,[417] following its gradual deterioration over a period of forty years. Alterations include the addition of a small parish hall and kitchen (in a new hemispherical volume connected to the church on its north-west side). Internally, the addition of office space has decreased the seating capacity from some 900 persons to around 300. Additionally, a side-chapel was created in an area of ancillary space to the right of the main entrance, and most significantly, the full centralisation that was achieved by the placement of blocks of seating on all four sides of the altar, has been undone by the sectioning off of the area behind the altar to create a baptistery. However, as the aim of this study involves the analysis of the churches as they were originally designed; subsequent additions and alterations shall be disregarded.

The substantial character of the church remains, however. In particular, that preoccupation with the cross-sectional possibilities of a building are once again celebrated in terms of illuminating the space indirectly; and its potential to act as an all-encompassing envelope for smaller, more independent structures beneath. Having

[417] The programme of alteration and renovation was undertaken by Donald Toner Architects and completed in September 2004. See Lomholt, I. (2010) *St. Benedict's, Glasgow: modern church building*. 25th January. Glasgowarchitecture. [Online] Accessed on 19th April 2014]
http://www.glasgowarchitecture.co.uk/st-benedicts-glasgow

established that entry is via the lower of the two structures by way of a glazed vestibule, and is not subject to the same degree of anticipation as at other Gillepsie, Kidd & Coia churches, the visitor arrives almost immediately into the main liturgical space. On either side of the entrance, peripheral accommodation is housed, again, within structures that do not meet the oversailing roof (the lower of the two monopitches). This device was used previously, but does not particularly define this with light, as at St. Joseph's, Faifley and Our Lady of Good Counsel. Instead, light is focused within these peripheral spaces, rather than by way of apertures demarcating them from the roof of the principal enveloping volume. Light comes from the clerestorey, and washes down the steeply-monopitched roof of the main space, into the general area of the altar. There is no lateral illumination of the altar, as had often been the case previously. The loadbearing side walls also bear the buttresses internally, but this time, each one rises to fully meet the ceiling, in contrast to the exterior, where they stop short of the roof parapet.

St. Benedict's, Drumchapel 1965-7



St Benedict's, Drumchapel (1965-7), Gillespie, Kidd & Coia. Source: The Glasgow School of Art GKC_CHDU_2_2_2 (no date).

St. Benedict's, Drumchapel, Glasgow was the penultimate of the firm's Roman Catholic commissions, and the one which further enriched and epitomised the contemporary concerns of its architects in a way that was perhaps more refined than St. Benedict's, Easterhouse. It celebrated and fused the key themes of centralisation of layout and exploration of light through the originality of the building's cross-section. The quasi-octagonal form of the church, although derived from a rectangle, was not one that the firm had used previously, and coupled with an unconventional section, makes this distinctive amongst the later work of Gillespie, Kidd & Coia, even if it was simply a development of earlier themes. Photographs of the demolished church expose its compelling oddness – standing on a relatively compact site on the south side of Drumchapel Road near Old Drumchapel[418]in North-West Glasgow, it formed part of a complex, which apart from the church, included a hall and presbytery; both attached to

[418] Rogerson, R. (1986) *Jack Coia his life and work*. Glasgow: Robert W. K. C. Rogerson., p.84.

the church in between. All three components displayed that strong sectionally driven design featuring pairs of monopitches of unequal heights; however, where this was seen as a very conventional representation of the by then ubiquitous device within the firm's portfolio in the church hall and presbytery, in the church itself, this had evolved into something altogether different. Approaching the church from the road, the visitor would have been confronted with a clustering of built elements; the regularity of the hall and presbytery offset by the disorientating angularity of the church. The hall was closest to the road, presenting a blind, roughcast gable end thereto and starkly delineated by the sharply angled monopitched section. Facing the hard-surfaced entrance courtyard, the front elevation of the extant hall is unremarkable in terms of the language of design components that the firm had by now almost begun to use as a standard response to ecclesiastical projects – in varying reconfigurations. The lower volume is treated as the plane of entry. It features an unassuming single-leaf door within a wall that incorporates the usual clerestorey glazing below the lower monopitched roof, and a palette of small, horizontally-orientated windows – five consecutively placed at the level of the top of the door, with two further windows above this but below the clerestorey glazing, and one below. Although the initial effect of this placement of the apertures above and below the regularly placed five appears random, they are actually identically-sized modules aligned with each other over the façade. Above the clerestorey, a small light chimney sits on the roof close to the gable end nearest to the road. Above this, the main clerestorey rises to the apex of the higher monopitch. Here though, the distinctive arbitrariness of the glazing re-appears in the placement of the slim mullions; here, tightly clustered; there, more closely spaced; the contractions and elongations in sharp contrast to the solid stasis of the gable end. As with previous examples, the whole of this ensemble – from lower volume to highest-level clerestorey – constitutes the hall's principal elevation. At the junction of the hall and the church is a virtually free-standing, low octagonal porch – a point of orientation for the church at human scale. The sweeping curve of the lower volume then metamorphoses into the clerestorey.

St. Margaret's, East Kilbride 1972

St. Margarel's, Clydebank (1972), Gillespie, Kidd & Coia. Source: Author (2016).

It is fitting that the final church that Gillespie, Kidd & Coia designed for the Catholic Church was dedicated to the saint who is credited with bringing Roman Catholicism in Scotland in line with the Church in Rome. Similarly, it was designed after the Second Vatican Council had convened, and was built long enough after these events for its impact to be felt in its design from the start – particularly in the omission of elements such as the altar rails.[419] St. Margaret's, Clydebank, also appropriately finalises the evolution of the firm's centralised church plan designs, and appears to reconcile liturgical matters with spatial concerns and use of materials.

Given the church's focus on introversion and centrality, it would seem appropriate to discuss St. Margaret's by working from inside to inside, rather than the inverse, as has so far been the case. Although centralised, the church is arranged such that the sanctuary occupies space in the corner of what is effectively a square-plan building, in the manner of William Temple Church, Wythenshawe. Geometrically strong, and lying low and broad within its residential setting at the intersection of Sinclair Street and Fleming Avenue, this building eschews many of the vertical accents and sectional experiments that had characterized much of the firm's previous ecclesiastical work. Instead, a gradual and

[419] Proctor, R. (2014). *Building the modern church.* Farnham: Ashgate Publishing Limited., p. 210.

modest elevation of the building mass towards the sanctuary area describes this building's hierarchy of space.

Internally, the broad single-space nave uses the square footprint to focus on the sanctuary by arranging the congregation such that one bank of seating aligns with the north-west wall, and another with the north-east. The central bank of seating is arranged around a diagonal axis that terminates at the sanctuary, which occupies the eastern point of the church.

Although certain tested architectural characteristics are again employed here, others are novel, and appear to be a direct response to the requirements imposed by the spatial idiosyncrasies of the design.

Buff-coloured brickwork envelopes the building; both internally and externally, with some playfulness exhibited in the interspersing of soldier courses between the stretchers; although not as intensively or frequently as the method used at St. Mary of the Angels. Similarly, a ziggurat stepping of brickwork to describe an angle is also used here around the sanctuary. The resultant shadow causes dark vertical bands, which frame the sanctuary and lend gravitas to the focal point of the altar.

Around the perimeter of the church – except for the entrance façade – roof lighting separates roof from walls. The focal device of top lighting space is very strong here. There are two banks of roof-lights angled down onto the sanctuary. The first is in line with the other perimeter glazing, and focused down onto the sanctuary and altar from its threshold with the nave, and the other – at a higher level, allows light to wash down the wall directly behind the altar, and helps to create the strong contrast between light and shade on the stepped brickwork, as described previously. All of the light-washed brickwork around the periphery is set in very direct contrast to the dark web of the steel space-frame that supports the wide-spanning roof; with only slim steel posts transferring its load to the ground around its own periphery. Thus, the visual separation of roof and walls, in tandem with the top lighting of the intervening zone, apart from creating a perimeter walkway, seems to reinforce the togetherness of the congregation and its attention on the sanctuary.

Externally, there is relatively little to describe the internal arrangement. A lack of fenestration – apart from on the entrance façade – characterises the aesthetic of this building. Instead, low, blind brick walls, sometimes partially buried within the

landscaped topography of the site, coupled with the leadwork of the parapets, suggest economy in materials and a dearth of unnecessary detailing in favour of an experience – both spiritual and architectural – that can only be had by entering the building.

As part of the entrance strategy, a low glazed wall adjoins the presbytery at a right angle, the external wall of which evolves into an angled retaining wall that extends to the entrance to the site, creating a low, external, protected gathering space at the threshold to the church itself.